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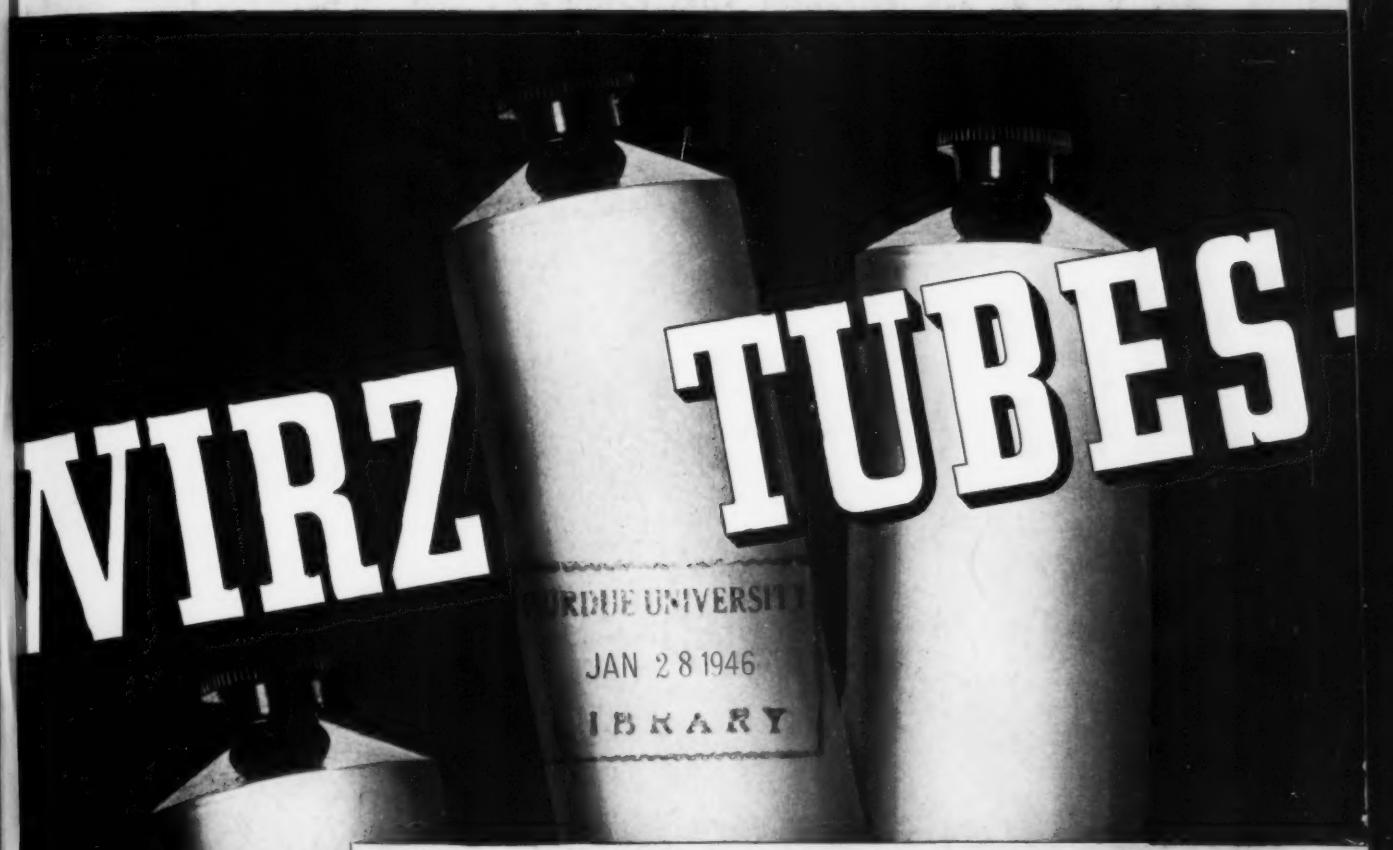
COSMETICS · SOAPS · FLAVORS



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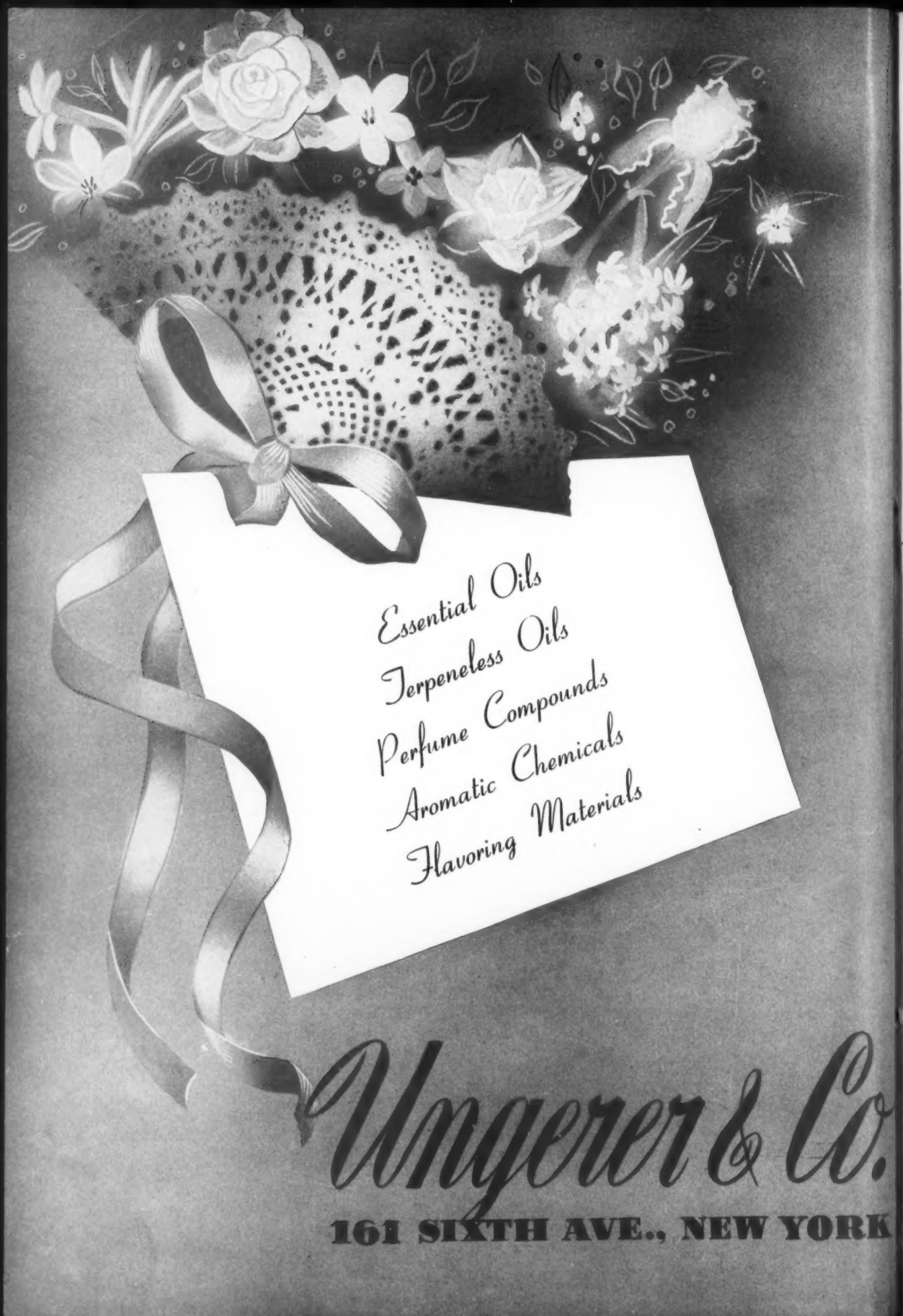
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the American Perfumer
and ESSENTIAL OIL REVIEW

COSMETICS · SOAPS · FLAVORS

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Editorial Comment

Case Against Elizabeth Arden Upheld

On December 3, 1945, the U. S. Supreme Court upheld the Circuit Court of Appeals for the 8th Circuit by refusing to grant a certiorari in the case where the Gus Blass Company of Little Rock, Ark., sued for, and collected, triple damages from the Elizabeth Arden Sales Corporation for unequal treatment in the payment of demonstrators salaries.

The original decision thus remains the law in this case and sets a precedent for any cases of a similar nature.

The Devaluation of the Franc

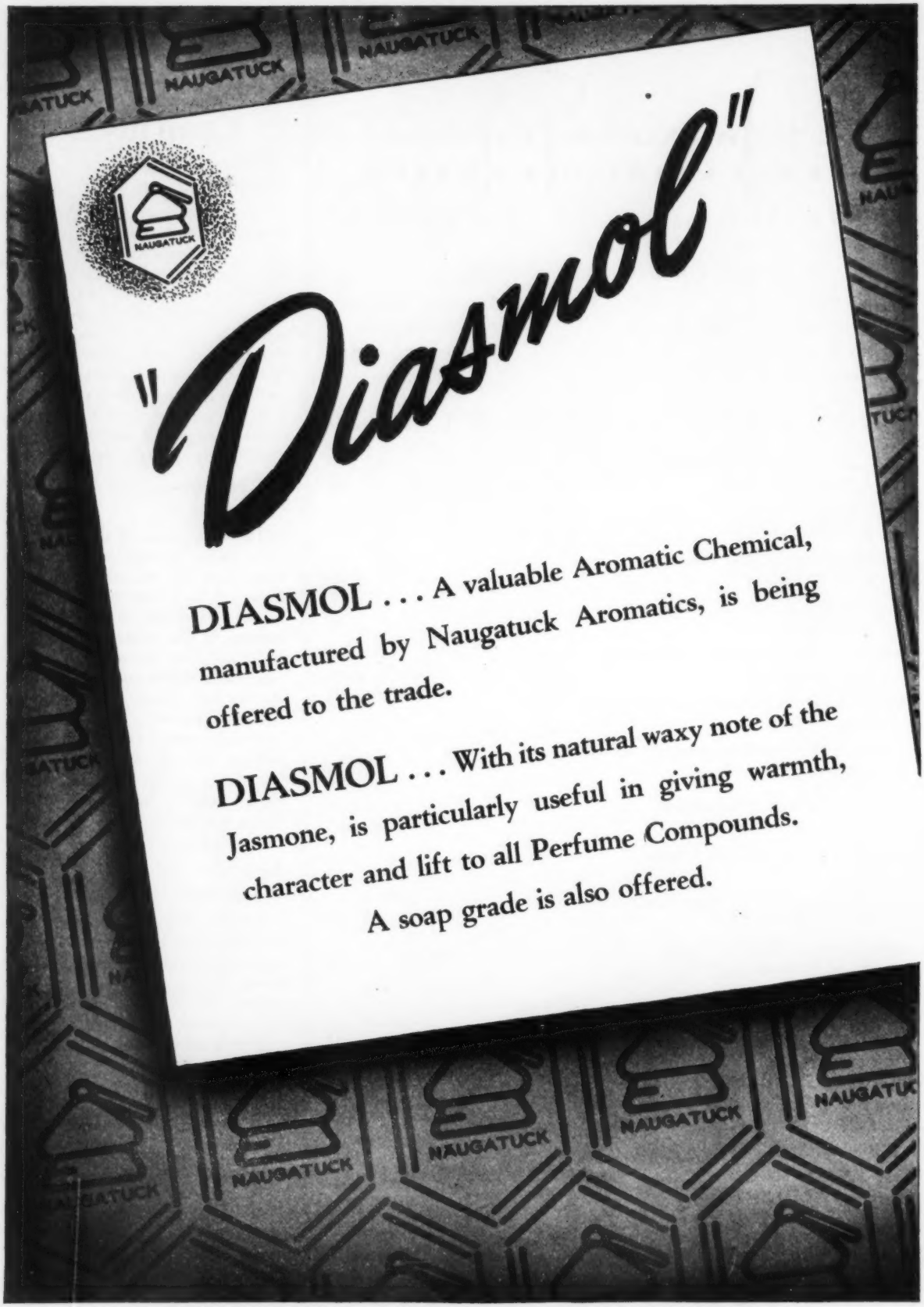
The devaluation of the franc has been under discussion for a long time. Now this has taken place and France is in a more happy position to carry on commerce with the other nations of the world. The change will bring down the cost of essential oils, which had risen alarmingly during the war. There is one fly in the ointment, however, and that is that cost has nothing to do with availability. The oils may cost us less, but there are far from enough of them to meet demand, and this condition promises to hold true for some time to come.

Paper Will Remain Tight

In spite of the fact that the demand for paper has been eased somewhat owing to the cancellation of war contracts, the paper and paper box situation will probably remain tight for several months to come.

This is largely due to three causes: The relief which has been coming from Sweden (a matter of 600,000 tons over the past six months) will probably decline immediately because shipping ports are normally closed by winter weather; thousands of prisoners of war who have been working the forests are scheduled to return to Europe next month, this will aggravate an already tight labor market; paper and box inventories all over the country are exhausted so that little flexibility of supply exists.

However, the picture is by no means as dark as it has been.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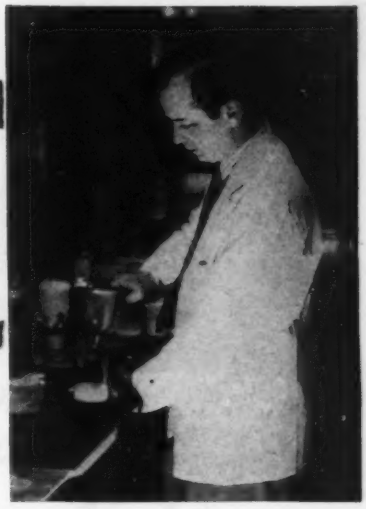
Desiderata

by MAISON G. DeNAVARRE



M. G. DeNavarre at work in his laboratory

CONSUMER QUESTIONS

This is being written only a few hours after I had addressed the Home Economics combined classes at Wayne University (Detroit) on January 2nd. The faculty head of the department handed me a list of questions that the girls had asked during the morning classes, and which they wished to have answered. They were a revelation to me of how these college girls think. And there is plenty of food for thought for manufacturers, too.

Some of the girls had of course read *100,000,000 Guinea Pigs*. Others read *Skin Deep*. Those that didn't read either had heard about it from their girl friends. They were at the age when all young men and women are easily impressed and when they have very lofty ideals. Most of all, they wanted truthful answers to questions that have bothered them. It was a fine group to talk to.

Excepting for editing trade names, the questions are given below as they were asked.

Is it true that cold cream increases the growth of downy hair on the face?

Is any special benefit to be derived from allowing cold cream to remain on the face overnight?

Is mascara harmful to the eyes?

Does the continued use of cake makeup tend to enlarge the pores and cause other damage to the skin?

What are some of the abrasives commonly used in dentifrices?

If baking soda and table salt are regarded as effective dentifrices, why aren't they more widely used? Is it because of their lack of 'psychological appeal'?

Is the daily use of a mouth wash, such as———, for example harmful to the mouth in any way?

By analysis, approximately what percentage of the average mouth wash is made up of an antiseptic; and what are some of the antiseptics commonly used.

What are the latest developments in the use of vitamins for the restoration of hair coloring?

Is it generally necessary to use a rinse (such as lemon or vinegar) to rid the hair of any final trace of soap after a shampoo, or will sufficient quantities of clear water do an adequate job?

Is there any law which stipulates that hand lotions must be labeled to indicate their alcoholic content?

Are there any permanent depilatories?

Hormone creams—do they cause cancer?

Can large pores be made smaller?

Can wrinkles be permanently banished?

Can acne be cured?

EMULSIFIED HAIR DRESS

Because of the difficulties in properly formulating a stable hair dressing of the water-in-oil emulsion type, one supplier offers a blend of materials which need be mixed only with water and a satisfactory hair dressing is obtained. No special processing is required but from the author's own experience, usually homogenizing is a desirable feature for emulsions of this type. Careful colloid milling works satisfactorily too. Accordingly, if you want to save yourself a lot of trouble and are anxious to have such a product for sale, we would suggest that you contact this supplier and give his material a whirl. The price seems fair and the samples made in the author's laboratory look good. Of course there is always the opportunity of adding lanolin or some other material for some special effect or of changing the ratio of the water and oil phase, but these are individual preferences that can be satisfied very readily.

ZINC VS. LITHIUM STEARATE

Lithium stearate has been available now for sometime, but little use of it has been made in the cosmetic industry, largely because zinc and magnesium stearates have served quite well. However, checking into the properties of zinc and lithium stearate, the following data have been found.

Under similar conditions of packing the volume of a given weight of lithium stearate is 157 as compared to 100 for the same weight of zinc stearate. Lithium stearate has an oil absorption of 140 as compared to 100 for the zinc stearate tested. Lithium stearate possesses an unlimited water absorption whereas zinc stearate has an exceedingly low water absorption. The specific gravity of the two materials is slightly different too—that for lithium stearate being 1.0028 while that for the zinc stearate tested was 1.095.

These data would indicate that lithium stearate would have some interesting applications, particularly in make-up. This is especially true in summer face powder. Its packing volume would make it interesting in cake make-up. Its water absorption

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property would likewise make it interesting in make-up of all types. Certainly, the lithium stearate is a fluffier material and if this characteristic is desired in a cosmetic, it should be picked for its applicability. In any event, the aforementioned properties of the two stearates indicate many possibilities and applications for lithium stearate in cosmetic properties.

XMAS PERFUME

Christmas day and thereafter, one could smell the nicest aroma around the lots where they had been selling Christmas trees. Stacks of them were going up in flames, and with the fires came the pleasant bouquet. It made me wonder why someone doesn't make little bags of pine needles and chipped wood to burn in the fireplace as a sort of incense around the holidays. There is nothing quite like the empyrumatic odor of burning pines.

HYDROXY ETHYL CELLULOSE

Competing with carboxy methyl cellulose is the ethyl derivative. It is available in several viscosities. The drawbacks noticed in *early experimental samples* have been overcome. The present commercial material is available as either a spray dried powder or a 10 per cent mucilage. It has certain advantages over some of the other gum-like material when used in a particular formulation. Presently, it is being tested for its suspending power on pigments, but it will take quite a while before the work is complete.

ROLLING HAND LOTION

Rolling hand lotions promise to be more than a passing fancy. They are a fine *quickie* hand wash where there is no water available, rolling away the dirt and leaving the hands feeling soft. Considerable interest has been shown in them over the past few years, although few companies have made stable products that could be merchandised. Some of the ether esters make a finely divided emulsion with good stability. In addition they possess their own inherent emollient properties. A dispersion of 25 per cent of paraffin wax with around three per cent of the ether esters of sorbitol or mannitol, in water is a fine looking white product, easy to tint and color. Don't overlook the value of these rolling lotions as facial massage products for oily skin or on large pores. It is amazing how the colloidal particles of wax pick up dirt and grime and form agglomerates sufficiently large to roll off easily. To appreciate it, you have to try it on yourself.

QUESTIONS AND ANSWERS

578. EMULSIFIED COLOGNE

Q: *We are writing to you regarding emulsified colognes. Do you have a formula for this item or other technical information as to emulsion base.*

S. G.—NEVADA

A: The formula for an emulsified cologne will vary a good deal with the compound to be emulsified. The real trick is to get a thin emulsion. The following formula has been used and under separate cover we are sending you the name of the supplier of the specialty mentioned: Polyalcohol stearate 4 per cent, potassium hydroxide 0.2 per cent, stearic acid 0.5 per cent, perfume 2 per cent, water to make 100 per cent. Melt the polyalcohol stearate and the stearic acid. Add the perfume. Keep at the lowest possible temperature. Mix the potassium hydroxide with water and heat to 75°C. Add the water to the fats under rapid agitation and continue mixing until cold. Pass through a colloid mill if desired.

579. HAND LOTION

Q: *I am taking the liberty again of coming to you for help with a formula for hand lotion of the better type. The maze of substitutes of unknown virtue requires too much experimental work for which we have neither the time nor means. Enclosed, stamped envelope is for your convenience.*

C. H.—WASHINGTON

A: The relative value of hand lotions is something that will have to be determined by the interested individual, since there are different degrees of preference for any hand lotion. One of the more modern formulas that we have found useful consists of specialty emulsifier 13.8 parts, triethanolamine 0.4 parts, tragacanth 2 per cent mucilage 10 parts, water 75.8 parts, with enough perfume, preservative and color. The directions for compounding the emulsion are sent to you under separate cover, as well as the name of the supplier of the emulsifier.

580. FORMULA FOR SACHET

Q: *Please furnish us with a formula for an inexpensive sachet. Also please furnish the source of raw materials except concentrate.*

E. R.—LOUISIANA

A: An excellent base is orris root which is available at this time, although the price may be higher than you can afford. If so, dilute with powdered material called white sachet filler, the supplier of which is sent to you under separate cover. We would suggest that you tint this sachet with a suitable color, preferably dissolved in alcohol, at the same time incorporating the desired percentage of perfume concentrate which should be at least 2 per cent of the total.

581. CREAM SHAMPOOS

Q: *We intend to market a cream shampoo in a 4 ounce jar and would appreciate it if you will please forward us formulae that you have available for such a preparation.*

D. C.—NEW JERSEY

A: We have no formulas for a cream shampoo, but suggest that you try some of the suggestions mentioned at different times last year in the Question and Answer Department and in Desiderata. One of the best ways to start is to use a commercial colloidal, magnesium aluminum silicate gel to which a sufficient amount of wetting agent is added to get the right amount of sudsing with the proper consistency. The names of some of the suppliers of wetting agents and of the colliodal gel are sent to you under separate cover.

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Essential Oils from Quebec Conifers

A résumé of a series of investigations of the economical utilization of conifer branches wasted in forest operations

by J. RISI† and M. BRULE*

THE economical utilization of conifer branches actually wasted in tremendous quantities in most of our forest operations is quite an important problem both from the standpoint of sylviculture and of forest protection against fire and epidemics imputable to insects and fungi, which ordinarily live on fresh or decaying lignocellulosic materials. The authors' work of which the present paper is a résumé[1] aimed to search for a practical suggestion dealing with this problem through a preliminary investigation on the yield of needle oils from various conifer branches as well as on the physico-chemical properties of these oils. The work was carried out at the Forest Products Laboratory maintained by the Provincial Forest Service at Duchesnay, P.Q.

MATERIAL AND METHOD OF STUDY

The needle oils of the following species were studied:

Eastern White Cedar
Thuja occidentalis L.
White Pine Pinus strobus L.
Balsam Fir
Abies balsamea (L.) Mill.
Black Spruce
Picea mariana (Mill.) B.S.P.
Eastern Hemlock
Tsuga canadensis (L.) Carr.

Part of the branches cut in the forest were distilled within 48 hours following the harvest, the rest after conservation in the shade for several weeks or months. No branches having a diameter larger than 0.5 inch were distilled. In certain cases the whole branches were charged in the still, but generally the material was cut up in a chaff-cutter prior to the distillation in order to break the oil-bearing ducts. The hashed material also assured a better compactness of the still charge.

The experimental copper still had a capacity of 92 imperial gallons. Three perforated shelves allowed a better distribution of the charge of branches and a more uniform steam circulation. Two copper steam pipe circuits were built in the lower conical part of the still, the one being perforated in order to pass live steam through the charge at a pressure of from 5 to 40 lbs per square inch, the other having a closed circuit transmitting the heat to water kept at constant level thus realizing the principle of steam distillation under atmospheric pressure. The escaping steam and oil were condensed in a water-cooled copper coil. Fig. 1 gives a partial view of the vital parts of the apparatus, and a schematic cut of the experimental plant is reproduced in Fig. 2.

The following analytical determinations were made on the collected oil samples: specific gravity, specific rotation refractive index, boiling range, solubility in ethyl alcohol, acid number, ester number and saponification number. The procedures followed were those of Gildemeister Hoffman[2] and of the Association of Official Agricultural Chemists.[3]

CONDITIONS OF CONSERVATION

The distillation of cedar and pine branches made with freshly harvested material and after conservation in the shade during a period of several weeks—all the other working condi-

Figure 1. Partial view of the experimental still.

† Director, Forest Products Laboratory, P. Q., Canada.
* Chemical Engineer.

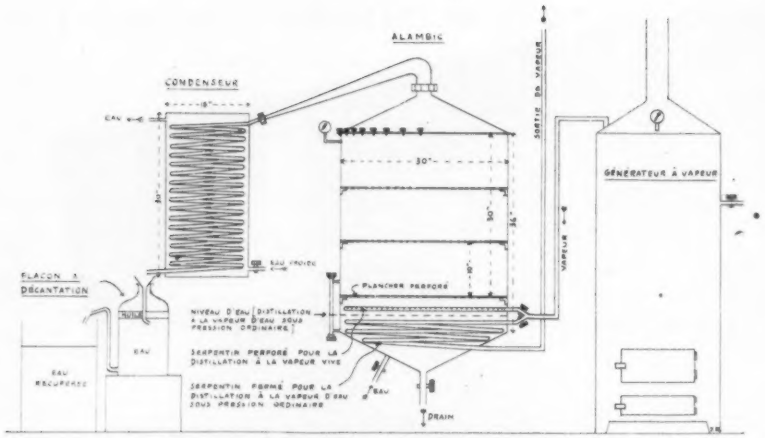


Figure 2. Schematic cut of the experimental still.

tions remaining the same—showed that the conservation of cut branches during a reasonable time, say up to two months in the cold season keeping the branches green, does not affect the yield of oil; however, the yield drops rapidly during the summer.

CONDITIONS OF PREPARATION

Several distillations were made under comparable conditions with whole and hashed branches of cedar, pine and hemlock. Hashed branches yielded 20 per cent (hemlock), 30 per cent (cedar) and 145 per cent (pine) more oil than the whole branches of the same species. On the other hand, one sample of cedar leaves from which all woody parts were properly eliminated, yielded 70 per cent more oil than whole cedar branches cut in the ordinary way. The higher yield of hashed branches clearly indicates that the better compactness of the charge prevents the steam from escaping along some channels of lower resistance, thus assuring a more intimate contact of the steam with the material. Finally, in spite of the high yield of oil from needles or leaves alone it should be practically impossible to realize this ideal condition on an industrial scale because of the high cost of labor involved in the removal of the needles from the woody parts of the branches.

VARIATION WITH STEAM PRESSURE

On a small experimental scale the use of steam under atmospheric pressure generally produces as much oil as live steam up to a pressure of 25 lbs per square inch. Industrial distillations, however, require live steam as the condensation and loss of steam at atmospheric pressure in the still will be too considerable. With big charges of branches a steam pressure of about 40 lbs seems to give the best results. Higher pressures are not recommended owing to the fact that some volatile constituents of the oil are particularly affected by high temperatures. For each species the ideal equilibrium between the steam pressure (temperature) and the quality of the oil has therefore to be established.

COMPACTNESS OF THE CHARGE

Several distillations showed the relation between the yield of oil and the compactness of the charge. Well packed branches yielded 10 per cent in the case of spruce, 45 per cent balsam fir, 65 per cent pine and 125 per cent cedar, more oil than the same weight of loosely packed branches undoubtedly for the above mentioned reason of more uniform steam circulation.

VARIATION WITH HABITAT OF TREES

Comparable distillations of branches from isolated sun-exposed trees and from trees grown in the bush revealed the higher oil content of the former. The increase of yield was, for example, 20 per cent for spruce branches and 100 per cent in the case of pine branches.

VARIATION WITH AGE OF TREES

A similar relation was found between young and old trees. Cedar branches from a tree of 15 years of age yielded 50 per cent more oil than those of a tree of 30 years of age. In the case of balsam fir (15 and 110 years) the increase of yield was 70 per cent, in pine (50 and 75 years) 25 per cent, and in spruce (25 and 45 years) 100 per cent.

VARIATION OF YIELD WITH SEASON

Fig. 3 illustrates the relation between the yield and the season. All samples considered in this graph were distilled under comparable conditions. It generally shows a first period of high yield during the winter months, from January to April, and a second but less pronounced

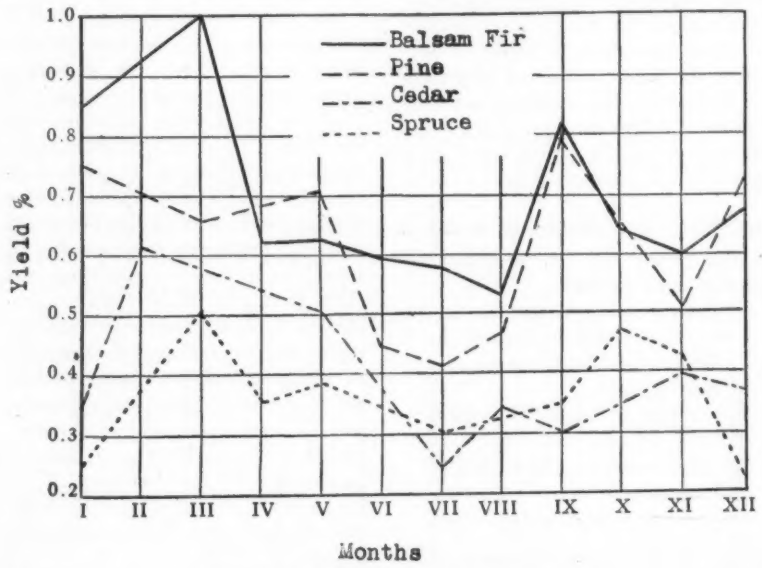


Figure 3. Variation of yield with the season.

period of good yield in the fall, say from September to November according to species. The lowest yields resulted in all cases during summer, from May to August. It seems to be of interest to note that the first period of maximum yield precedes the period of strong cambial activity in the spring, whereas the second one succeeds to the formation of summerwood.

Plant physiologists should easily find an interpretation of this noteworthy correlation.

AVERAGE YIELD OF OIL

Nineteen distillations of cedar branches averaged 0.45 per cent of oil, fourteen balsam fir 0.65 per cent, sixteen pine 0.58 per cent, eleven spruce 0.35 per cent and four hemlock 0.22 per cent. These figures compare well with those obtained by European or American authors for the same species.

The average yield of pine and balsam fir seems to be somewhat higher, whereas that of spruce and hemlock is a little lower than the corresponding figures given in American references.

In a systematic work of this nature it was necessary to operate sometimes under very unfavorable conditions such as with non hashed branches, branches kept during a certain time, low steam pressure, loose charge, old trees, etc., in order to determine the action of these variable factors upon the yield. The hope is thus justified that even higher yields may be expected on an industrial scale where, generally speaking, an ensemble of rather favorable conditions may easily be realized. According to results currently obtained under such circumstances, the yields one may expect on a commercial scale with adequate equipment will vary between the following limits: cedar 0.6-1.0 per cent, balsam fir 1.0-1.4 per cent (yields up to 2.0 per cent have in some cases currently been obtained), pine 0.6-1.0 per cent, spruce 0.5-0.7 per cent, and hemlock 0.4-0.6 per cent.

Such figures may be regarded as satisfactory from the commercial point of view.

PHYSICO-CHEMICAL PROPERTIES

Table 1 shows the mean, maximum and minimum values of some physico-chemical indices of the oils which were examined in the series of investigations.

If we compare the results of this table with those obtained from leaf oils of similar species grown in other countries or regions, we conclude that Quebec conifer leaf oils compare well with the others in a general way. Cedar oil seems to have even a higher ester content (calculated as bornyl acetate) than the oil of the same species grown elsewhere. Unfortunately the same good news does not apply to the oil of balsam fir. Its average ester content (29.9 per cent) corresponds to only 10.5 per cent bornyl acetate whose maximum and minimum figures are 16.3 and 6.3 per cent respectively, whereas the oil of Siberian fir (Abies sibirica) contains from 29 to 40 per cent of bornyl acetate. The significance of this fact is a hard competition on behalf of the Siberian oil under normal commercial conditions, in spite of the very interesting yield of our balsam fir. On the other hand it is noteworthy that our spruce and hemlock oils may seriously compete with the Siberian oil as far as the bornyl acetate content is concerned. Quebec oil of spruce averages 34 per cent bornyl acetate (minimum 20 per cent, maximum 47 per cent), and the oil of hemlock contains from 24 to 44 per cent of this ester with an average value of 37 per cent.

Table No. 1

Mean, Maximum and Minimum Values of Some Physico-Chemical Indices of Quebec Conifer Oils

Oil of	Number of Samples	Refractive Index at 20°C	Specific Rotation $[\alpha]_D$	Acid Number	Ester Number	Saponification Number	Specific Gravity at 15°C	Boiling Range °C	Solubility in 90% Alcohol
Cedar									
Mean	19	1.4595	−12.15	0.98	30.2	31.2	0.9192	177-207	0.4
Maximum		1.4687	−16.3	1.43	69.5	70.3	0.9232	215	0.6
Min mum		1.4540	− 5.1	0.71	14.0	15.4	0.9102	170	0.2
Balsam Fir									
Mean	14	1.4754	−23.5	0.60	29.9	30.5	0.8828	161-195	5.4
Maximum		1.4779	−26.5	0.85	46.6	47.2	0.8890	163	7.2
Minimum		1.4727	−20.5	0.45	18.2	18.7	0.8800	155	4.2
Pine									
Mean	14	1.4752	−21.5	0.73	11.5	12.2	0.8688	159-195	7.6
Maximum		1.4776	−26.0	2.42	23.5	24.1	0.8957	160	9.0
Minimum		1.4730	−13.1	0.31	4.8	5.1	0.8560	156	6.2
Spruce									
Mean	11	1.4697	−33.7	1.59	97.0	98.6	0.9141	160-221	0.7
Maximum		1.4722	−41.8	2.44	133.1	135.3	0.9260	164	1.2
Minimum		1.4686	−25.8	0.99	57.2	59.6	0.9070	155	0.4
Hemlock									
Mean	4	1.4702	−23.5	1.31	105.4	106.7	0.9178	162-220	0.3
Maximum		1.4766	−24.4	2.14	125.3	126.6	0.9387	165	0.6
Minimum		1.4671	−22.0	0.74	87.6	88.3	0.9090	160	0.2

SOLUBILITY OF OILS

Finally, the solubility of these oils in alcohol gives a rough idea of their qualitative composition. The less soluble oils of pine and balsam fir certainly contain terpene hydrocarbons to a large extent, whereas other oils contain larger quantities of alcohols and esters (oil of spruce and hemlock) or of ketones (oil of cedar leaves), these oxygen derivatives being more readily soluble in dilute alcohol than the terpene hydrocarbons.

[1] For further information on the same subject see: Canadian Journal of Research, Vol. 23, Section B, pp. 199-207, 1945, and Bulletin No. 9, Forest Service, Department of Lands and Forests, Quebec, Canada.

[2] Die Aetherischen Oele. 2nd edition. Vol. I. Schimmel & Co., Leipzig, 1910.

[3] Official and tentative methods of analysis. 5th edition. A.O.A.C., Washington, 1940.

Spanish Essential Oils

From January through August 1945 exports from the Seville Consular District in Spain (Provinces of Badajoz, Caceres, Cadiz, Cordoba, Huelva, and Sevilla) included 17,636 pounds of oil of cade, valued at $8,788; 16,659 pounds of oil of eucalyptus, with a value of $15,695; 2,204 pounds of oil of origan, $4,851; 81,569 pounds of oil of rosemary, $81,111; 6,040 pounds of rue oil, $17,849; 141,091 pounds of spike oil, $280,448; 13,261 pounds of oil of thyme, $27,809; 2,240 pounds of spike lavender flowers, $306; 2,240 pounds of gum labdanum, $2,658; and 1,102 pounds of bitter orange leaves, $201.

Other exports during the same period included 2,204 pounds of oak moss, valued at $570, and 880 pounds of resinoid of oak moss, worth $11,791.

Short Adages

by R. O'MATTICK

HERE it is—another new year starting—full of hope and expectation! We trust that it will be a very bright year with prosperity and health and good cheer and not too many SHORTAGES except of the kind that meander in this Column and do no one harm—sometimes even cheering the heavy spirit of the buyer and of the supplier who are beset with divers difficulties and disappointments. A HAPPY NEW YEAR TO YOU ALL and may your shadow never grow less.

* * *

We wish to thank our many friends who have sent us HOLIDAY GREETINGS AND CHEER. Not suspecting how high we stood in the estimation of some readers of THE AMERICAN PERFUMER until the arrival of those half dozen tall bottles of Black & White—the product of that lovely dour country of moors and old castles, which has spread liquid cheer throughout this vale of tears—we now say with the good Scotch Poet:

"Old Ayre—wham no town surpasses
For honest men and bonnie lasses."

* * *

Now that the franc is down quite a bit, another country which has spread liquid cheer of another sort may start, sending some flower absolutes herewith. Qui sait?

* * *

We do not hold any brief for heredity nor do we claim that the sense of smell and the art of perfumery are inherited but the following is a well authenticated story: A perfumer recently visited his first new-born grandson. While bending over him in admiration, the young fellow reached for a book of smelling blotters sticking out of the upper vest pocket of Grandpa. Fortunately, the little fellow cannot read as yet. Otherwise he would have noticed the name and seal of the Essential Oil imprinted on the book of blotters and you know what first impressions are. Years from now he would say: "I knew that House only a few days after I was born and they never let me down. Much as I would like to give you the business—I feel I ought to continue to buy Flower Essence of Elysian Fields from them. Besides—they gave me credit before I had a shirt to my back—so Grandpa says."

* * *

Sun Oil Company and the Houdry Process Corporation have developed methods for producing in substantial quantities an isotope of Carbon—called Carbon 13.

"I knew," said Dr. Rowmateral, when interviewed about this announcement, "that sooner or later—the development of atom-splitting would lead to something remarkable in the field of perfumery."

"How do you come to that conclusion?" we asked.

"Simple," replied the good doctor. "Practically every single ingredient of perfumes, the floral absolutes (when and if present), the aromatic chemicals, the resins, the balsams, the gums, the animal fixatives, even the very alcohol, all contain the element carbon. Now, without delving into atomic theory, these materials contain carbon whose atomic weight is either 12 or 13. Perhaps the natural products contain the isotope whose weight is 13 and that explains why the phenyl ethyl alcohol that is now made doesn't smell like the phenyl ethyl alcohol from Otto of Rose. Perhaps if we could make linalyl acetate with carbon atoms weight of 13 we would have better luck with the results. But right now we will accept phenyl ethyl alcohol or linalyl acetate with the old-fashioned carbon atoms—market conditions still being what they are."

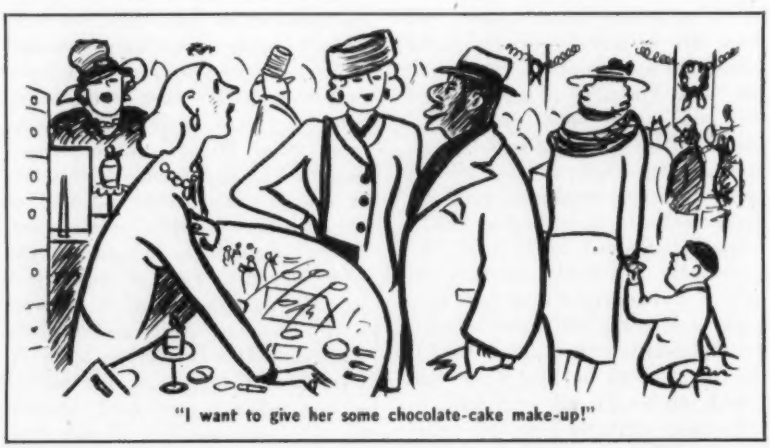
One of the very best events of the year is the Annual Meeting, Dinner and Entertainment of the Essential Oil Association. The yearly affair was held at the Hotel Pennsylvania on January 11th—with the usual cocktails—food, fun and good fellowship. The usual question in the prewar days when one E. O. man met another was: "How's business?" (meaning—can you find anyone who wants to buy something). During the war the question was: "Have you anything left to sell?" Now the question is: "Are you getting anything in?" Do you know the answer to that one? Full details in our next issue.

* * *

The rage in men's toiletries hasn't abated. A chain of hat stores is in the thing—a famous leather goods house is getting ready to come out with a men's line. We had an awfully good gag about all this but we jotted it down somewhere on New Year's Eve and can't for the life of us recall what it was or where we put it. Yes sir—that's what New Year's Eve does to us!

* * *

In the December issue of *Reader's Digest* we read an interesting article on famous slogans and the remarkable story of how the CALL FOR PHILIP MORRIS originated. That gives us an idea which we pass on *gratis*. What about naming a men's line by some he-man name like PERCIVAL DUFFYNGTON and have all the page boys at the leading hotels the country over page him once a day. No—that is not the gag we had lost about men's lines—when we find it we shall let you have it—gratis.



"I want to give her some chocolate-cake make-up!"

The Effect of Polyols on Emulsions

*A comparison of the behavior of glycerine, propylene glycol and commercial sorbitol syrup**

by M. G. DENAVARRE
Maison G. deNavarre Associates

ABOUT five years ago, the author first became aware of the variation in behavior of polyols in emulsions when used to replace each other in a particular formula. It is reasonable to expect a different result with either glycerin, propylene glycol or sorbitol syrup since the molecular structures are dissimilar. This difference in emulsifiability is also apparent in the monostearates of various polyols when used in like amounts in a given formula. But, it was not expected that the great contrast thus far found would be manifested.

And so, a series of experiments was started about six months ago, in an effort to gain a clearer understanding of effects to be expected. Four types of cosmetic creams were formulated, using materials from the same lot. The same technic, even the same length of time was used for mixing. All samples were stored under the same conditions and observed at the same time. No attempt was made to determine the *optimum conditions* or *formulation* for a particular polyol.

In brief, the object of these experiments was to determine the effect on the physical and observable characteristics of a formula when one polyol replaced another, in the same amounts. This is a preliminary report summarizing the data at hand.

The results are interesting and explain many "incidents" that happened in the past years. They show that the closeness of chemical constitution between propylene glycol and glycerin does not mean that they will behave similarly or nearly so when one replaces the other. Deductions are further confused by the finding that commercial sorbitol syrup and propylene glycol behave much alike. In testing one of the vanishing creams it was found that concentrations of 15 per cent commercial sorbitol syrup were well tolerated both in formulation and in use; the sticky feeling so often attributed to higher concentrations of sorbitol syrup in vanishing creams did not show up.

WATER-IN-OIL TYPE CREAM

The first emulsion made was of the water-in-oil type containing:

Lanolin anhydrous	14%
Mineral Oil 130 Viscosity	13%
White petrolatum	33%
Sorbitol mono-oleate	1%
Magnesium sulfate	0.2%
Water to make	100%

It was modified to the extent that 5 per cent of water was replaced by glycerin, propylene glycol and commercial sorbitol syrup respectively. All samples were homogenized in a small hand homogenizer at the same temperature and pressure.

The control containing no polyol and the sample made with 5 per cent propylene glycol showed best stability at 110 deg. F. after first having been frozen at 5 deg. F. for 12 hours. The glycerin sample showed most oil separation.

The highly desirable marshmallow-like stringiness and tackiness was most noticeable in samples made with glycerin and with commercial sorbitol syrup. The control and the propylene glycol containing samples were alike in this respect, but less stringy than the first two creams.

Ease of emulsification was noticed in the presence of all polyols excepting glycerin; the latter actually appeared to prevent emulsification by interfering with the ability of the water-in-oil emulsifiers to take up the water.

VANISHING CREAM

A stearic acid or vanishing cream was then made from the following formula:

Stearic acid-triple pressed	15%
Potassium hydroxide com'l	1%
Polyol	15%
Isopropyl palmitate	2%
Water to make	100%

The smoothest emulsion was formed with propylene glycol. Commercial sorbitol syrup and propylene glycol containing creams developed the highly prized pearliness or sheen within 12 hours. It took 48 hours for pearliness to develop in the glycerin formulation. After one month, all creams looked alike, but the glycerin containing cream was the hardest, sorbitol syrup was next hardest while the propylene glycol cream was the softest.

It was in these experiments that the absence of stickiness in the sorbitol cream was noticed. All three creams applied readily. The propylene glycol cream gave the driest feel; glycerin the wettest with commercial sorbitol syrup more like propylene

* This paper was presented before the Scientific Section of the Toilet Goods Association.

glycol than glycerin, using a uniform technic in application.

LOTION

A typical hand lotion was formulated from a special glyceryl monostearate containing only 0.5 per cent potassium soap and with other fixed physical and chemical constants. This special glyceryl monostearate was necessary for it was impossible to get desired data on the constants from ordinary suppliers.

Glyceryl monostearate	3.55%
Stearic acid	0.66%
Oleic acid	0.66%
Lanolin, anhydrous	0.66%
Mineral oil 65/75	4.4 %
Triethanolamine	0.44%
Polyol	13.33%
Water to make	100%

A control made with water in place of the polyol emulsified most readily. Propylene glycol was next best with glycerin and sorbitol syrup behaving alike. The sample containing no polyol had the best pouring properties, followed closely by glycerin. The sample made with propylene glycol was next best while the sorbitol syrup tended to cause gelling of this emulsion, thus preventing flow.

In a slightly different formulation in which part of the mineral oil was replaced by a thin synthetic oil, only the control and the sample containing glycerin would pour after being bottled for 1 week.

Emulsions made with non-ionic emulsifiers in place of mono-glycerides and triethanolamine are now being made and will be reported at a later date.

A BRUSHLESS SHAVE

Brushless shaving cream is both a type of vanishing cream and a superfatted soap paste. A formula utilizing non-ionic emulsifiers was developed to test the effect of polyols on the product.

Stearic acid-triple pressed	12.5%
Sorbitan monostearate	2.5%
Sorbitan monostearate polyoxy-alkylene derivative	1 %
White petrolatum	10.0%
Polyol	5 %
Ammonia water 28%	2 %
Water to make	100%

Due to an accident, the sample made with commercial sorbitol syrup was lost. The sample made with propylene glycol was firmest: that made with glycerin was softest. Both were otherwise similar.

The same formula was suplicated using 15 per cent of *mixed polyols*. Only two samples were available for checking. The one contained 2.5 per cent commercial sorbitol syrup plus 12 per cent propylene glycol; the other 2.5 per cent commercial sorbitol syrup with 12 per cent glycerin. The glycerin mixture was firmest. The propylene glycol mixture gave the best gloss and pearl. The glycerin mixture produced a grainy cream.

CONCLUSION

The polyols of commerce namely, glycerin, propylene glycol and sorbitol syrup, while possessing humectant and plasticizing properties, replace each other only to a limited extent. A formula balanced with one polyol may be completely unsalable when substitution with another polyol is made. This is particularly true of liquid emulsions containing glyceryl monostearate and triethanolamine soap. Consistency in a vanishing cream formula may be increased or decreased by selecting the proper polyol. In emulsions of the water-in-oil type, effect on emulsification is most readily observed.

Essential Oil Round-Up

Argentina is producing two varieties of mint: Menta Mitcham (*Mentha piperita*) and Menta Japonesa (*Mentha arvensia*, variety *Piperascens*). The 1945 acreage planted to mint is 556 hectares, of which 531 hectares are located in the Province of Mendoza, according to official reports.

Although production of peppermint oil in 1945 is expected to reach 8,340 kilograms, Argentina imports sizable quantities. In 1944, such imports totaled 7,687 kilograms, and in 1943, 9,919 kilograms.

While a number of small farmers had been experimenting with the cultivation of mint, it was only after the creation of the Dirección de Cultives Especiales under the Argentine Ministry of Agriculture that this plant was given serious consideration for production on a commercial scale. The mint is grown by numerous small farmers, some of whom pool their harvests for the extraction of the essential oil in cooperative stills.

LEMONGRASS OIL IN INDIA

The west coast of the Madras Presidency, the mountain slopes of Malabar, and the foothills of Travancore in southern India are among the world's chief sources of lemongrass for the production of oil. During the season July, 1944, to January, 1945, the area under lemongrass in southern India was estimated at about 25,000 acres. An increase in acreage is expected as a result of the anticipated rise in prices of the oil, now that hostilities have ceased. The estimated yield of lemongrass oil from July, 1944, to January, 1945, was 400 tons, twice the output in the preceding season.

Prices of lemongrass oil in Cochin during the year ended January, 1945, were $26.40, highest quotation, and $16.95, the lowest, for 12 bottles of 22 ounces each, delivered at coastal warehouses. Quotations for the year ended January, 1943, ranged from $6.45 to $17.10.

In April, 1945, export prices to the United States were quoted at $62.50 per ton of 40 cubic feet. In the same month quotations to the United Kingdom were £5 10s. 6d. per ton of 2,016 pounds.

ESSENTIAL-OILS IN SICILY

Unofficial estimates place the 1945 production of essential oils in Sicily at about 200,000 kilograms. Considerable quantities of lemon oil now are being shipped to continental Italy and prices have risen rapidly, recent quotations being 1,500 lire per kilogram, compared with between 500 and 700 lire which the Foreign Commerce Institute has been paying for Allied accounts. Bergamot oil, which is produced chiefly in Calabria and marketed largely through Messina, is quoted at prices ranging from 1,500 to 1,600 lire per kilogram. Production of this oil in 1945 is estimated at 125,000 kilograms, compared with 160,000 kilograms during 1944.

Floral oils, such as jasmine, produced in the Province of Messina, are said to be finding a demand among Italian perfumery manufacturers at between 60,000 and 70,000 lire per kilogram.—*Foreign Commerce Weekly.*

Cosmetic Trends in the Middle West

Men's toiletries have moved into a high sales class . . .
Stores find volume sales of set, kits and combinations
. . . Perfumes for day and night wear to be featured

by JEAN MOWAT

WHEN dirt farmers from Iowa begin endorsing finer toiletries for men, and do it at the expense of the tax payers, it might almost rate as front page news. Instead the papers which have received such releases are placing them on the women's pages. It is smart psychology to consider how much of the actual buying is done by women. But in addition to this idea on how to put over a campaign to sell men these items, it is opening new avenues.

SELLING MEN'S PRODUCTS

Domestic Commerce carries an article under the by-line of L. A. Barber on how to sell cosmetics to men. Of course, we are grateful to Mr. Barber for indicating an upward trend in such selling. Perhaps we do not altogether agree that the psychology of glamour should be used to sell men. We have it on the authority of leading men's custom tailoring establishments which have been for some time suggesting types of cosmetics to go with tweeds, hunting clothes, and the silk topper that, out in the Great Central West, our men can be reached with a man's appeal.

You know the middle West has always gone along on its own way, quietly feeding the entire nation from its opulent bread and meat baskets and will continue to do so. We only hope that Mr. Barber read our article last June to learn that men from overseas had been writing letters requesting the best deodorants on the market. Probably each other's buddy made the suggestion for foxholes are not noted for their delicious fragrance.

From the point of view of the buyers in leading stores in the breadbasket country, and they are no more easily taken off a scent than the best blood-hounds, there has been a steady growth of men's toiletries during the past ten years. The first of these items came from England, and were smartly packaged and well suited for the masculine shelf in any bathroom, or in any travel kit. Some of the keen manufacturers saw in this an idea upon which they could capitalize and began trying out American products, putting these into smart bottles to satisfy the sporting trends—bottles with decorations of hunting, fishing, polo, etc. These made a direct appeal to men of good red blood, consequently they sold.

However, it was not until these items were placed in the men's stores that they moved into the big sales class. True, women do buy a large quantity to order, as any secretary can tell you, who does the boss's buying, but they also follow the advice of the man behind the counter.

WE LOOKED OVER HIS SHOULDER

When a big retail buyer let us look over his shoulder at his figures for the year's end we were blinking when he looked up and caught us spying. "Well, that's nothing," he said, "I coulda doubled 'em if I'd the goods. Too bad, 'cause I'd like this year to be tops. We'll more than make our figures, but that's not enough for me. What with all the women buyin' for men, and the men all buyin' for the women we're a bit mixed up, but the figures won't be, you can bet your bottom dollar on that, old boy."

We sighed. The figures were sweet. Everyone, we judged would be sweeter for 1946's opening days than during 1945's closing ones. With subways, "els" and busses so jammed we decided it would be nice to try and detect the odors and then try and collect on 'em.

All comments aside, the year is going to make perfume and cologne history the biggest recorded since about 1929, and then men's colognes were from England, with a dash of smart types from Paris, but much too costly for even those days of high prices.

The trend is definitely upward in men's goods and as one buyer told us: "It's not new. It's just beginning to grow in a substantial form. We make a point of selling not one, but two or even three items, for we men like to have things match. So, that, naturally makes a good sale. And we've found that a man handles these sales very well. Usually he tries them. And what's more we can't use a 'sissy' type, but very much of a he-man type is wanted. Or else we use a clever saleswoman. We don't have success with the blondes, but the older woman with a good line, a charming smile and a keen sense of humor handles men and women equally well, which results in substantial sales. And we are here to sell merchandise, not physical beauty back of the counter," he said.

NEW PACKAGES FOR A NEW YEAR

The New Year had barely adjusted its swaddling clothes into more comfortable freedom when buyers began studying the package outlook for Easter and considering the placement of business for that event and for summer cologne selling. There are

several factors to be cleared up immediately. Cardboard is still a tight item. No one seems to know, just now, how much will be released for packages, or the weights. Also how many gay bottles can be used for the essences. Then after they have been located designs must be offered.

That more and more packages will be sold is the idea at the present time. This opinion is based on the heavy sale of packaged goods last Christmas. These were naturally pushed well to the front and given adequate display in windows, show cases and advertising. Walgreen's states with considerable emphasis that it is out to cut into the excellent cosmetic sales of department stores. It used about 20 pages of advertising to put over the package idea between Thanksgiving and the week before Christmas. There was only one flaw in this program: The merchandise gave out about the time the last ad ran. "The demand was so much greater than we had anticipated and planned for, and we were unable to increase our quotas, so we did miss sales," said a merchandiser, "but it proved that our training schools for the clerks produced the results we wanted."

As Walgreen's sold only packaged goods they gave this merchandise an excellent test at a time when other stores were competing for it in the same cities, and still had goods to sell. It was said by this firm and others equally as important in the cosmetic field, that the best sale of merchandise has been to men.

SALES OF SETS IMPORTANT

Sales of sets are usually a holiday item, but a dozen buyers express the opinion that sales of sets all last year showed improvement. "This in spite of the fact that the boxes, kits and combinations were not as smart as we have had," commented a dean of buyers in the Middle West.

St. Paul stores found sets moving in excellent volume. St. Louis reported that any combination idea found instant approval. Hudson's of Detroit made a point of featuring the less expensive groups and offered these for from a low of $1.50 to a top of $4, and did a whale of a business, over the counter and by mail. As all advertised items were smartly illustrated this helped out-of-town selling. Hudson's was one of the few stores that confined presentation to one or two lines, then drove it hard.

Wasson's of Indianapolis used the holiday red as background for its half and three-quarter page ads to present the idea of a unit sale. These came in gay baskets, kits, a glove package for one's handbag, and others had merely a complete unit for care of the hands. Kansas City and Minneapolis stores followed much the same general program of presentation. When it came to stores in Des Moines, Milwaukee, Duluth Omaha, and smaller centers through this territory all types of packages were offered, for merchandise was lacking in comparison with the sales registered. Some few of these stores took their own white boxes, "chiffed" them up and found spot sales. This was especially true in Chicago.

Nowhere have sales of sets been so important as in the junior lines. These went into a spiral for the year-end and several full pages of advertising presented them in slick-chick style.

PERFUMES VS. DEODORANTS

There may be a war in cosmetic sections during 1946. Wind of this came when women wanted a special type of perfume. It was, of course, sold out in the Christmas rush. Questioning brought out the information that too many women find deodorants are not satisfactory—for them anyway—that the best of them will leave some deposit on the fine fabrics. So they have been substituting a triple essence to take the place of this, and hoping it works.

The most conservative buyers disagree with the women on this point. They insist that if the best deodorants on the market are *used* as directed, and given a little care in application that the result is high satisfaction and freedom from any odor. But they also suggest that a day-time scent be used to give a filip to one's morale. Thus two sales can be made to grow instead of one.

Many buyers are expressing the hope that in 1946 women may be educated to select two types of perfume: A day-time fragrance and an essence of the same odor for evening. "We find that regardless of all the fine writing done about what is what in perfumes," said a leading State street buyer of a Chicago store, "women continue to purchase the same general odor they like. Our girls suggest a different scent, but while it is accepted the woman is still sold on her first choice, and will return for it. So we've about given up trying to satisfy her idea of what she shouldn't use. She's going to wear it, so we're taking the road of least resistance and letting her make her own choice," he added, and we might add, smart man!

The perfume departments are suggesting as a plus sale, that a cologne be purchased.

LOOKING BACK TO SEE AHEAD

As buyers plan for order placing during the first quarter of 1946 they will do so from the recorded sales made during the last quarter of 1945. Summed up they read about like this:

Increased sale on kits. Cosmetic treatment lines good. Hand lotions, nail creams in kits, excellent.

Packaged perfumes excellent. More modern and colorful types wanted. Also bottles in perfumes and colognes easy to handle. Collectors' items still strong in all bottles.

Give men's toiletries as smart presentation in their own sections as women have in the cosmetic departments. Stay away from word "cosmetic" as related to men's goods.

Make more of a point of freshness as a high factor in the sale of deodorants. Discourage sale of any cheap ones, and stress the fact that the most expensive is the cheapest in the long run.

As warm weather approaches, the theme of perfumes for day-time wear, as distinguished from formal wear, should be given wide display and featured advertising. This has not been done to any extent and it is a new field offering wide possibilities.

For February-March selling stress finer skin lotions to prevent chapping. Make a strong point on foundation creams with matching powder.

Heavy sale of compacts during the recent holidays ought to indicate a return to more face powder. Sales on face powder should be a unit with the compact. Few compacts sold with cake enclosures.

Watch for keenly worded and smartly featured drug store advertising. Department stores need a change in presentation, counter display, and more advertising addressed "To You."

Dermatitis Among the Users of Cosmetics

*The majority of skin injuries due to the use of cosmetics result from allergic dermatitis . . . Hair preparations rank highest in effecting irritation . . . Trial procedures can assure the safety and sale of cosmetics**

by LOUIS SCHWARTZ
Medical Director, U.S. Public Health Service

IF one considers the fact that a large proportion of the population of the civilized world uses cosmetics, then it is realized that the cases of dermatitis from cosmetics reported in the medical journals constitute a very minute fraction of the users. For instance; since 1930 to 1941, Schwartz and Peck in their new book "Cosmetics and Dermatitis" which is now on the press can find only 15 references in the literature. The records of 113 stores, members of the National Retail Drygoods Association reported only 71 customer complaints of alleged dermatitis from the use of cosmetics purchased in these stores during a period of 18 months, January 1940 to July 1941. Among these 113 stores are included the largest department stores of this country. Hair preparations rank highest in producing dermatitis. These consist of hair dyes of the paraphenylene diamine type, hair wavers, and straighteners, hair lacquers, hair tonics, and depilatories. Nail preparations such as nail lacquers and cuticle removers have often been reported as causing dermatitis.

Cheilitis from lipsticks rank next in order and deodorants follow lipsticks.

Soaps and synthetic detergents have often been reported as causes of dermatitis, but it is questionable to class them as cosmetics.

Reports of dermatitis from creams, perfumes, and powders have been but infrequently reported.

The following chart lists the cosmetics reported to have caused dermatitis among the public:

COSMETICS REPORTED TO HAVE CAUSED DERMATITIS

COSMETIC	CHEMICAL CAUSES	TYPE OF DERMATITIS	COMPARATIVE FREQUENCY
Hair and eyelash dyes	Oxidation dyes Paraphenylene diamine Paramido phenol Orthoamido phenol Paratoluene diamine Metaloluene diamine	Allergic	Now rare but frequent when these dyes were first introduced
Hair wavers Hair straighteners	Sulfides; thioglycolates; (reducing agents) Per salts (oxidizing agents) and alkalis	Primary irritant and allergic	Fairly common
Hair lacquers	Resins; alkalis		
Depilatories	Sulfides; thallium salts	Primary irritant	Fairly common
Nail lacquers	Resins of formaldehyde and ester gum types. Dyes of the Eosin group which are photosensitizers. Rhodamine B: deep maroon	Allergic	Fairly common
Lipstick	Dyes chiefly of the Eosin group: Perfume (methyl heptine carbonate)	Allergic	Fairly common
Deodorants	Aluminum salts	Primary irritant and allergic	Fairly common
Soaps: synthetic detergents Skin cleansers	Alkalis: Phenols Defatting action on skin	Primary irritant and allergic	Fairly common
Perfume	Oil of bergamot (photosensitizer) Methyl heptine carbonate Synthetic jasmine Linalool, eugenol Copper in perfume container	Allergic	Rare
Creams (face)	Petrolatum, triethanolamine, methyl heptine carbonate, phenols, mercurials (freckle remover)	Allergic	Rare
Face powders	Orris root (no longer used in face powder) dye	Allergic	Rare

CHEMICALS CAUSE DERMATITIS

Some few individuals may develop dermatitis from substances which are innocuous to most people. This type of dermatitis occurs as a result of the peculiar constitution or idiosyncrasies of these exceptional individuals, and is called allergic dermatitis. But, there are chemicals which in strong concentrations will cause dermatitis on any one exposed to their action for a sufficient length of time. Such chemicals are called primary cutaneous irritants. Phenol is an example of this class of chemicals.

There are many substances which will not upon first contact even in strong concentrations cause any discernible change in the skin, but they

*From Dermatoses Section, Industrial Hygiene Division, Bureau of State Services.
This is the last of a series of three articles by Louis Schwartz.

will cause changes to take place in the body of some people, as a result of which, after a period of five days or longer have elapsed since the first contact, subsequent contact will cause dermatitis. These substances are known as allergens or sensitizers. Lanolin or wool fat is an example of this class of substances.

Some of the primary irritants also possess the power to cause such allergic changes and as a result some few people may become allergic to such primary irritants, and will develop dermatitis from exposure to dilutions of the chemical which does not affect unsensitized individuals. Phenol and the salts of chromic acid are examples of chemicals which are both primary irritants and sensitizers.

SENSITIZERS VARY IN STRENGTH

The sensitizers vary in their strength to cause sensitization. Some of them will sensitize a larger percentage of exposed individuals than others. For instance, paraphenylediame (a hair dye) is said to be able to sensitize 6 per cent of those exposed to large quantities of it, whereas, it is rare to find a person allergic to henna, another hair dye.

In a book "Cosmetics and Dermatitis" which is now in press, a list is given of the chemicals in cosmetics which may cause dermatitis either by primary irritant action, or because they are sensitizers.

The majority of the cases of dermatitis from cosmetics occur among the general public. Outside of dermatitis from the improper use of depilatories, cuticle removers, perspiration inhibitors, bleaching and freckle creams, hair wavers and straighteners, all of which contain primary skin irritants, the majority of skin injuries among the users of cosmetics belong to the allergic class, and have been caused chiefly by synthetic hair and eyelash dyes, lipstick, nail lacquer containing a synthetic resin as a substitute for unobtainable shellac.

NEW AND UNTRIED COSMETICS

While cosmetics as a class rank among the safest of substances insofar as producing dermatitis is concerned, yet there are occasional outbreaks of dermatitis among the public from new and untried cosmetics. Such outbreaks not only cause suffering but also cost the cosmetic manufacturer considerable money in settling damage suits. Moreover, it makes the public doubt the safety of cosmetics and fearful of their use.

TESTING EFFECTS ON SKIN

The cosmetic industry owes it to the public and to itself to spare no means in order to place only safe cosmetics on sale. This can be done by testing the effects on the skin of new cosmetic formulas before placing them on the market.

Before placing a new formula on the market, closed patch tests should be performed by a competent dermatologist on at least 200 subjects with the new formula, using as a control an old formula which had been on the market for years, and which caused no unusual number of complaints. The closed patches should remain on for 48 hours after which the reactions should be read each day for three days in order to observe late reactions. The number of reactions obtained from the new formula should not exceed that number which was obtained from the old.

Ten days after the last reading of the reactions new closed patches of both new and old formulas should be reapplied on the same 200 subjects and allowed to remain on for 48 hours and the reactions again read each day for three days after removal of the patches. If the number of subjects showing sensitization reactions from the new formula exceeds the number showing sensitization reactions from the old formula, the formula is unsafe. These tests will give an idea of the relative skin-irritating and sensitizing properties of the new formula as compared with the old one, but do not give an accurate idea of what may happen under conditions of actual use. Therefore, the following additional tests should be performed:

The same 200 people should actually use the old and the new cosmetic each day on opposite sides of the body for a period of four weeks. If no cases of dermatitis result from the new formula it is safe to place on trial sale. If only one case results, then another group of 200 people should be subjected to the actual use test. Only if no cases of dermatitis result among these is it safe to place the cosmetic on trial sale. If more than one case of dermatitis occurs among the first 200 subjects after four weeks of actual use the cosmetic is unsafe.

TRIAL SALE

By trial sale is meant the sale for a period of not less than one month (if no cases of dermatitis are reported before this time) in one community where between 5,000 and 10,000 packages of the cosmetic are to be sold. If no cases of dermatitis are reported during the trial sale, then the cosmetic is safe. If cases are reported during the trial sale the manufacturer should employ a competent dermatologist to investigate them and determine the actual cause. The continued sale of the cosmetic or its withdrawal from the market should depend on such an investigation.

If cosmetic manufacturers adopt the trial procedures advised above before placing new cosmetic formulas on the market, they will avoid harming the public, the cosmetic industry, and its distributing agencies. Those manufacturers of cosmetics who adopt the trial procedures can appraise the public of the fact in their advertising, and may thus increase the sales of their products.

The cosmetic buying public may soon demand that the manufacturers of the cosmetics which they buy shall perform such tests on their products as will assure their safe use by all but the very rare highly allergic individual whom it is impossible to safeguard from a cosmetics made for the general public. Such exceptional people should use specially prepared cosmetics for their own individual use.

In the November issue of THE AMERICAN PERFUMER a news item appeared which stated that the plant of the Dominion Essential Oils Co., Lakefield, Ontario, which had been destroyed by fire a year previously was again in operation.

In actual fact, the plant mentioned was one of a number of plants used in the distillation of fir oils. Other distillation facilities, as well as the warehouse and offices in Lakefield remained unaffected. The plant which was destroyed by fire was rebuilt a few months afterward, and has been in operation without interruption since that time.

Action of Antiperspirant Creams on Fabrics

The composition of the base material in an antiperspirant cream is as important as the balance of aluminum salt and buffer . . . To change any single ingredient is to risk increasing fabric destruction†

by RUTH R. BIEN, B.S.*

THE investigation of antiperspirant creams has been a problem—and no small one—for this laboratory during the last 10 years. Our work has been guided by primary emphasis on two factors—the effectiveness of a cream in safely controlling perspiration, and its safety in contact with textiles.

Elaborate research has been conducted by other laboratories on the effectiveness angle to achieve a quantitative measure of the retarding action of various products under controlled laboratory conditions. We have conducted no investigations of this kind. What we have wanted to know, is, quite simply—"Will this product give adequate protection under condition of *everyday activity*—to the stenographer at her desk or the housewife in her kitchen?" This phase of the subject is, however, primarily the province of the Beauty Editor's practical use laboratory. This paper will be concerned almost entirely with the action of these creams on textiles.

THE PROBLEM

When it became evident that fabric damage from contact with low pH creams was likely to occur, a long series of investigations were conducted to provide answers to a number of basic questions: 1. Are all types of textiles vulnerable to the action of these creams? 2. What are the conditions which will produce maximum damage? 3. Can laboratory results constitute a prediction of results in actual use?

Our reasons for wishing to establish a laboratory procedure, by the way, were two-fold—the considerable saving in time which would be effected, and reluctance to ask the necessary group of human guinea pigs to use a product which might be potentially destructive.

To answer these questions, a number of creams were applied in varying amounts to cotton, linen, viscose rayon, acetate rayon, silk and wool, and were maintained under different conditions of time, temperature and humidity. The effect of ironing the treated materials with and without preliminary laundering was also studied. Briefly, our conclusions from these preliminary studies were: Silk, wool and acetate rayon are highly resistant under all practical conditions; linens, cotton and viscose rayon are extremely vulnerable; maximum damage is produced by ironing without preliminary laundering. Creams which contain no buffering ingredient will usually cause complete destruction of cotton, linen and viscose rayon when so treated.

PRACTICAL USE STUDIES

The Beauty Editor's practical use studies, which ran parallel to the laboratory work, pointed up a practical projection of these results. Many women will subject garments—summer cottons and linens and blouses in particular—to pressing between launderings or dry cleanings. The application of heat, therefore, to fabric impregnated with these acid creams would provide a set of conditions similar to the pressing of unlaundered garments to which antiperspirant had adhered. Admittedly, this direct application of cream to fabric, followed by ironing without laundering, is fairly severe treatment. We therefore elaborated our correlation of laboratory and wear test results until we had a set of laboratory conditions which could be accurately projected to predict actual use results. Early in the course of our work, cotton was adopted as the test fabric, because it was extremely susceptible to damage and because it was, at that time, available in sufficiently uniform quality. The laboratory conditions which were finally adopted (Appendix A) involved the application of a uniform amount of cream to a one inch area down the center of a strip 21 x 6 inches, incubation of the treated material at high humidity and slightly elevated temperature, followed by ironing for 10 seconds in a flat bed electric ironer set for a temperature range of 275-295 deg. F. The tensile strength of the treated material was then determined against controls to which no cream had been applied, but which had otherwise been similarly treated. At least 5 strips, representing 25 individual breaks are used for each product under investigation.

Antiperspirant creams which caused a reduction in tensile strength of less than 20 deg. under the above conditions were found to cause negligible damage in use. It was necessary, of course, to devise a method of estimating damage in use in order to correlate the results of our laboratory investigations, and also as a final check in doubtful cases.

* Good Housekeeping Bureau Laboratory.
† This paper was presented before the Scientific Section of the Toilet Goods Association.

TABLE 1

Effect of Ironing Without Laundering

	Per cent loss in Tensile Strength after 24 hours incubation at 80 deg. F and 85 per cent Relative Humidity	
	Not ironed	Ironed
Cream A—buffered	no loss	1.78
Cream B—partially buffered	no loss	62.24
Cream C—not buffered (contained aluminum chloride)	35.69	85.84

TABLE 2

Effect of Prolonged Incubation (1 week) at 80 deg. F and 85 per cent R.H. Without Ironing

	Per Cent Loss in Tensile Strength
Cream A—buffered	no loss
Cream B—buffered—"bleeding" type	no loss
Cream C—not buffered (contained aluminum sulfate)	no loss

This procedure (Appendix B) involves the pinning of shields made from the cotton test fabric into the dresses of our groups of human guinea pigs during a three day period in which the antiperspirant cream under investigation is applied each morning by an expert operator. These shields are worn during the business day, are removed at night and replaced each morning. At the end of the three day period these shields are ironed at the usual temperature for cotton—375 deg. F.—and any reduction in tensile strength measured against unworn controls.

EFFECT OF BUFFERS

The establishment of these two methods represents many months of work and the destruction of untold yards of material—fortunately at a time when there was plenty to destroy. For a number of years thereafter there was pretty plain sailing. The products which were handled at that time fell pretty sharply into two categories, those which contained a buffering ingredient and those which did not. The former gave uniformly satisfactory results from the standpoint of fabric destruction—the latter often disintegrated completely when they were ironed, thereby sparing the tedious job of breaking the strips. In the last few years, however, the picture has been a very different one. There are three major reasons for the difficulties which we have encountered since early in 1942:

Raw material shortages due to the war; a rapidly growing market for antiperspirant creams, resulting, of course, in the launching of many new products; the desire of manufacturers to present an improved product in the face of increased competition.

One of the greatest bugbears with which manufacturers of these creams have had to contend is their marked tendency to dry out in the jar—a tendency which was accentuated in many instances by war-induced changes in jar closures, The addition to a formula of some humectant material seems a logical and simple method of correcting this fault, but therein, hangs a tale. In any case, at about this time, creams began to appear on the market which exhibited a peculiar phenomenon when subjected to the incubation at high humidity called for in the laboratory procedure. By the end of the 24-hour incubation period, a breakdown in the emulsion had occurred, resulting in a "bleed" of watery exudate on either side of the center area to which the cream had been applied. This "bleed" is often irregular, so that a single strip may contain areas where no break in the emulsion seems to have occurred, and others where it has. The picture of tensile strength reduction presented by those "bleeding" creams is a peculiar one. Low breaks, indicating bad damage, occurred *outside* of the treated area, at points where the watery exudate has saturated the fabric. The breaks are often very irregular, the extent of the damage seeming to depend on the extent of the separation. In these instances of irregular "bleeding" it is not unusual to have percentages of destruction ranging from a low of 10-15 per cent to a high of 100 per cent on a single strip.

The first question which had to be answered in view of this new problem, was, of course, "Will these creams behave similarly in actual use?" A series of wear tests resulted in an emphatic "Yes."

Because it's our business to try to find the reason why, and because we are always anxious to give all possible help to manufacturers, we have studied this problem fairly exhaustively, and the end is not yet. In fact, basically, it is just beginning.

"BLEEDING" CREAMS

One of the more puzzling aspects of the behavior of the "bleeding" creams was why, even if a separation occurred, fabric damage should be so increased, since most of the buffering agents in general use are easily water-soluble and should, theoretically, travel with the water phase of the emulsion. We have, therefore, made an attempt to determine just what does happen. A carefully weighed amount of a cream which we knew to be a bad "bleeder" and on which we had complete analytical data was applied to strips of cotton in the usual manner. These were then incubated as usual to allow the separation to occur. The one inch area to which the cream had been applied was then cut out of each strip. Buffering agent, sulphate and aluminum were determined both on the center strip and on the outside pieces where the watery exudate had penetrated. The results were quite interesting. Only one third of the buffering agent had traveled with the water phase into the outside area. The other two thirds was held with the base material on the center strip. On the other hand, two thirds of the total sulphate present was found in the outside areas, and *no* aluminum, beyond an insignificant trace was recoverable from that portion. This seems to offer an explanation of the sharp rise in fabric damage, and why it occurs in the "bled" area. Not only is an insufficient level of buffer present, but the sulphate is there, presumably, as free sulphuric acid. The foregoing is the result of work on only one product, and we are by

TABLE 3

Dispersion of Ingredients in a "Bleeding" Cream Incubated 24 Hours at 80 deg. F. and 85 per cent R.H.

	Buffer	Sulfate	Aluminum
Total present	12.07%	6.87%	1.16%
Recovered from center strip	6.97%	2.08%	trace*
Recovered from outside areas	4.37%	4.65%	trace*
Total recovered	11.34%	6.73%	trace*

* Aluminum evidently attached to acid—insoluble fraction.

no means ready to draw final conclusions from it. It is our plan to extend this work not only to other products, but to an effort to discover more of the whys and wherefores of the behavior of acid emulsions on fabric and on the skin.

IRONING TIME AND TEMPERATURE

Early in our experience with the unstable type of cream, and also with another type, which did not "bleed," but which still produced 30 to 50 per cent damage, it became evident that in these cases the ironing time and temperature became extremely critical. A non-separating cream, properly formulated and buffered, will stand an increase in the ironing temperature of 15-20 deg. F. Without marked increase in the amount of damage produced. Similarly, a completely unbuffered cream will produce marked damage 15-20 deg. F. below 275 deg. F. The two special cases referred to above, however, may give a seemingly satisfactory result if the temperature regulation is at all off on the low side, and the extent of damage increases markedly with any rise above the usual range. This has presented difficulties in cooperative work with other laboratories, and for this reason we have lately been attempting a modification of our standard method, substituting a hot air oven for the ironing process.

MODIFICATION OF STANDARD

In our first set of experiments the oven was set so that the temperature during exposure was at the mean range of the ironing temperature—285 deg. F. Sets of treated strips were exposed for periods beginning at 5 seconds and ending at 120 seconds. This work was done on a product which had been subjected to the regular procedure, and our purpose, of course, was to establish a time of exposure in the oven which would produce the same amount of damage as was incurred by the ironing. Our results suggested that 100 seconds exposure in the oven produced approximately the same level of damage as did the ironing (Table 4). This investigation will have to be extended to a much larger group of products before any definite conclusion can be reached. One very interesting thing is suggested by this preliminary study, the critical importance of time as well as temperature of exposure. This would account partially at least for variation in the results of different operators, even when all other factors have been duplicated and controlled as completely as possible. Such variations might be due not only to the accuracy with which the individual operator timed her exposures, but also to the speed at which she worked, since the unavoidable temperature fluctuation of an electric ironer is, of course, affected by the time intervals between opening and closing.

TABLE 4

Loss in Tensile Strength Using Hot Air Oven at 150 Deg. C as Source of Heat—Cream D
Loss by standard ironing procedure—52.57 per cent

Oven Exposures	
5 seconds	2.22 per cent
10 seconds	5.36 per cent
20 seconds	8.39 per cent
40 seconds	10.02 per cent
80 seconds	29.85 per cent
100 seconds	49.89 per cent
120 seconds	68.97 per cent
140 seconds	71.73 per cent

A second series of oven exposures, suggested by discussions with another laboratory with which we have been doing cooperative work, was undertaken to explore the possibilities of longer exposure at a lower temperature. In this series, the oven was set at 105 deg. C. and a pan of water was placed in it in an attempt to prevent undue drying out of the strips during the longer exposure. Four creams were used—which had showed the following levels of damage by the ironing procedure; A—Non-bleeding—12 per cent; B—Non-bleeding—37 per cent; C—Bleeding—60 per cent; D—Non-bleeding—50 per cent.

The times of exposure were 15 minutes, 30 minutes, 45 minutes, 1 hour, 1½ hours, and 2 hours. Exposures up to one hour resulted in negligible damage by all four. Cream A was still showing damage under 20 per cent at the end of 2 hours. The other three showed significant damage at both 1½ and 2 hours, but the results did not correlate too well with the ironing procedure (Table 5).

These incomplete studies have been discussed for several reasons. First, they have been sufficiently interesting so that they will be continued. Second, they emphasize the undeniable fact that the problem with which we have to deal is far from a simple one. It is certainly no news to those who are concerned with the formulation and manufacture of acid emulsions that they are, to put it mildly, temperamental. It is possible, however, that the importance of every single ingredient in an antiperspirant cream formula may not be fully appreciated. The composition of the base material is fully as important as the proper balance of aluminum salt and buffer. To change any single ingredient, or its concentration, in a satisfactory formula, is to risk increasing the fabric destruction potential from a safe to a dangerous level.

All this comes back to the need for a real job of basic research—a job in which Good Housekeeping's laboratory is eager to cooperate to the fullest extent of its capacity, but one in which the participation of manufacturers not only of the finished product but of all the many possible components thereof is absolutely essential.

APPENDIX A

LABORATORY METHOD FOR DETERMINING POSSIBLE FABRIC DESTRUCTION BY CREAM-TYPE ANTIPERSPIRANTS

1. Cotton percale is used for the purposes of this test. All material is to be washed and pressed before using. This is to be done in an ordinary washing machine using a ¼ per cent solution of Lux or other mild soap at 130 deg. F. at the start, for 15 minutes, with 2 rinsings. Pressing, after drying, to be done in an ironer with the thermostats set at 275 deg. F.

2. From the washed and pressed materials, strips 6 inches wide and

TABLE 5

Comparative Losses in Tensile Strength by Standard Ironing Procedure and Exposure in a Hot Air Oven at 105 Deg. C

	Standard Procedure	Oven 15 min.	Oven 30 min.	Oven 45 min.	Oven 1 hour	Oven 1½ hours	Oven 2 hours
Cream A—non-bleeding	12.32%	no loss	no loss	no loss	no loss	2.93%	19.60%
Cream B—non-bleeding	36.59%	no loss	no loss	no loss	5.32%	53.67%	73.08%
Cream C—"bleeding"	64.00%	no loss	no loss	no loss	5.88%	32.46%	42.80%
Cream D—non-bleeding	52.57%	no loss	no loss	no loss	3.73%	44.69%	48.83%

21 inches long (or longer is desired) are to be cut across the goods, after removing a 1 inch selvage strip. A 1 inch area is to be marked off down the center of the length of these strips for the application of the antiperspirant.

3. At least 5 such 6 in. x 21 in. strips shall be used for each test—giving at least 25 breaks in each case.

4. The cream shall be applied as evenly as possible and with the minimum of rubbing to the marked area of each strip in the proportion of approximately 2.5 gm. per 21 square inches.

5. The strips shall be suspended in an enclosure in which the temperature is 80 deg. F. and the relative humidity is 85 per cent for 24 hours.

6. A set of controls (at least 5 strips 6 in. x 21 in.) to which no cream is applied shall be started on each day that tests on cream are begun. They shall be treated in every respect as the test pieces.

7. At the end of 24 hours ageing, the strips shall be pressed for 10 seconds in an electric ironer (preferably a flat-plate type) with the thermostats set so that the temperature range shall be between 275 deg.-295 deg. F. Sufficient time before beginning the pressing shall be allowed for the ironer to warm up and reach a steady state. The strips are to be laid, cream-side down on strips of paper toweling placed on the pad. The shoe shall come in direct contact with the back of each strip. The strips shall be pressed in rotation as rapidly as possible—e.g. Control strips No. 1. Sample A strip No. 1, Sample B strip No. 1, etc. Note: The electric ironer should be previously tested and adjusted as far as is possible for uniformity of temperature throughout the shoe. The period of temperature cycle ($\pm$10 deg. F.) in such ironers is usually at least 10 minutes. By pressing the strips in rotation as described, it is believed that this unavoidable variation will be distributed so as to give nearly uniform results.

8. After pressing, the strips shall be conditioned at 80 deg. F. and 85 per cent relative humidity for 3 hours.

9. Before the last conditioning period, the strips shall be cut up into 6 in. x 4 in. pieces—rejecting ½ in. at each end. The 1 inch strip to which the sample was applied will then run across the middle of these pieces from one long edge to the other. A pencil mark shall be made 1½ in. from one of the 6 in. edges and along a single continuous thread. This is to serve as a guide for the application of the jaws of the testing machine. At the end of the 3 hour conditioning period the strips shall be broken by the grab test using ing 1 inch jaws in a motor-driven tensile strength machine—preferably the Suter machine.

10. A decrease of tensile strength, under the conditions of this test, up to 20 per cent is allowable provided that the number of breaks showing a reduction in tensile strength over 20 per cent does not exceed 5 out of a total of 25.

APPENDIX B

PRACTICAL USE PROCEDURE FOR DETERMINING POSSIBLE FABRIC DESTRUCTION BY CREAM TYPE ANTIPERSPIRANTS

1. A group of at least 20 women shall be used, and should include light, heavy and normal perspirers.

2. Forty-eight hours before the start of the investigation, the underarms of the testing group shall be shaved, and they shall be instructed to use no antiperspirant of any kind until the start of the investigation.

3. The creams under investigation shall be applied by an expert operator, strictly in accordance with the individual manufacturer's directions, after the underarm has been washed and carefully dried.

4. Pieces of cotton test fabric 4 x 6 inches in size shall be pinned into the dress of each subject by the operator. These shields shall be marked "Right" and "Left" and shall also carry some mark identifying them to the individual subject.

5. These shields shall be worn during the length of the business day. At the end of the day they shall be removed, and each set placed in an envelope marked with the wearer's name or code number.

6. The application of the cream shall be repeated for the two following days, making a total of three days in all. The shields shall be replaced each morning, and removed each night as described above.

7. On the morning of the fourth day the shields, together with unworn controls, shall be pressed for 10 seconds in an electric ironer with the thermostats set for 375 deg. F. Any loss in tensile strength in the worn shields is then determined against the unworn controls. A properly formulated and buffered cream should not cause a reduction of more than 10 per cent under the conditions of this test.

8. If the results of this investigation are in doubt, it shall be repeated, using a second group of at least 20 subjects.

Britain Coordinates Research

A bill has been introduced in the British House of Lords, the Industrial Research Bill, designed to make possible the creation of an industrial research association for each industry, according to the British press. Each of these associations would be financed by a levy placed upon the individual proprietors of the industries receiving the benefit of the research, not to exceed one per cent of each contributor's annual revenue.

The object of the bill is to improve and strengthen existing machinery for forming and operating industrial research associations by enabling the majority interests in any industry to put before the Board of Trade a scheme for operating an association. As the scheme is proposed, if the Board approves the scheme, a poll will be taken of the proprietors in the industry in question, and if a number representing seventy-five per cent of the annual turn-over or revenue of the industry vote in favor, a research association will be formed.

A method of "contracting out" of any such association is provided for those who would not derive benefit from it, and provision is also made for an appeal for any proprietor who might wish to do so.

The advantages to be derived from such a proposal are perfectly obvious to the manufacturer and to the purchasing public. Research has always played an important role in the progress of industry, and with the limits of knowledge being pushed back so rapidly it is now more essential than ever before.

Technical Abstracts from Scientific Literature

These brief abstracts listed provide a convenient key to current scientific literature of the world on perfumes, cosmetics, soaps, dentifrices and other preparations

Comparative duration of estrus produced by ovarian and urinary estrogens. Raul F. Mello and C. Franke. *Rev. brasil. biol., 4,333-8 (1944)* (*In English*). From 50 to 250 of estrogen (in oil) was injected into spayed rats. Estrone produced estrus lasting 2-3 days. a-Estradiol dipropionate produced estrus lasting 11-15 days and the 17-caprylate estrus of 31-6 days. The urinary estrogens estriol, equilenin, and a- and b-dihydroequilenin produced estrus lasting less than 2 days. (Through *C. A.*, **39**, *2118, 1945.*)

Sodium amylopectin glycollate: A new substitute for natural colloids of high swelling capacity. F. Hoppler. *Chem.-Ztg.* **67**, *No. 7-8, 72-6 (1943)*; cf. *C. A.*, **37**, *1038*. $C_6H_9O_4$—O—$CH_2CO_2Na.2H_2O$, from starch and $ClCH_2CO_2Na$, forms highly viscous water solutions. Quasi-viscosity values are determined. The replacement of gum tragacanth and several possible uses are discussed. (Through *C. A.*, **37**, *5553-54, 1945.*)

Effect of various bacteria on biacetyl content and flavor of butter. P. R. Elliker. *J. Dairy Sci.*, **28**, *93-102 (1945)*. A modification of the Pien, Baisse, Martin method (*C. A.*, **31**, *6751*) for biacetyl detn. proved accurate, highly sensitive, and rapid. A large number of bacterial cultures, including widely different genera, proved capable of destroying biacetyl added to sterile skim milk. Several Psudomonas species isolated from butter and creamery water supplies actively destroyed biacetyl in experimental butters Commercial butters, known consistently to carry large numbers of bacteria of this type, showed a pronounced loss of biacelyl during keeping-quality tests. Preliminary trials on experimental butters indicated that Ps. putrefaciens reduced biacetyl to acetyl methylcarbinol and 2,3-butylene glycol. Results indicate that the factor responsible for inhibition of Psudomonas species by butter-starters in butter is Str. lactis or related bacteria. The specific factor is presumably acid produced by the inhibiting bacteria. (Through *C. A.*, **39**, *3369, 1945.*)

A method of distributing b-radiation to the reticuloendothilial system and adjacent tissues. Hardin B. Jones, Charles J. Wrobel, and Wm. R. Lyons. *J. Clin. Investigation*, **23**, *783-8 (1944)*. Suspensions of anhyd. $CrPO_4$ were made from both ordinary and radioactive P, the average particle size being 1 micron. These were given to mice and dogs, and their eventual distribution noted in the tissues. About 90 per cent of the material was found in the liver and most of the remainder in the spleen and lungs. It was retained in the endothelial cells of mice for 1 year. The concentration of B-radiation in the liver is about 100 times that of other tissues except the lungs. About 27 per cent of the radiation originating in the liver and spleen of mice was absorbed by the adjacent tissues up to a 0.6-cm. distance. In larger animals where the minimum thickness of these organs is 1 cm., relatively little external loss results. The physiological effects and toxicity are described. (Through *C. A.*, **39**, *2081, 1945.*)

Soap. Ernst H. Peter. *Ger. 711,633, Sept. 4, 1941* (Cl. 23e.2). A creamy, thin-(or) thick-flowing soap is obtained by passing NO through a soap solution for as long as it will be absorbed. Such soap gives a thick fine-bubbled lather. (Through *C. A.*, *4268*, **37**, *1945.*)

Laboratory method for the preparation of organic acid anhydrides. Jehuda Orshansky and Eliahu Bograchov. *Chemistry & Industry, 1944, 382.* The anhydrides are conveniently prepared by stirring 8 mols. of the corresponding Na salt (anhyd.) with 1 atom of S and 6 atoms of Br with cooling for 0.5 hr. and distilling off the anhydride. The yields were 87.5 per cent Ac_2O (98 per cent pure), 85 per cent $(EtCO)_2O$ (90 per cent pure), and 60 per cent BZ_2O, the last being made in CCl_4 soln. (Through *C. A.*, **39**, *3253, 1945.*)

The Chemistry of Odor. L. Blas. *Mon. farm.*, **49**, *135-9 (1943.)* An attempt is made to show a relationship between chemical composition and definite odors. (Through *C. A.*, **38**, *1254, 1944.*)

The Recovery of Flavoring Oil From Persian Limes — Preliminary Experiments. C. D. Atkins, Eunice Wiederhold, and J. L. Heid. *Fruit Products J.* **23**, *306-8 (1944)*; cf. *C. A.* **36**, *577*. Preliminary tests were made on the quantity of oil present in an obtainable from culled Persian limes and a comparison was made of extraction equipment and treatments in recovering the cold-pressed lime oil. A sample of cold-pressed Persian lime oil extracted during the tests had the following properties: sp. gr. (at 20/20 deg.) 0.844; optical rotation (at 20 deg.) 40°34′; n(at 20 deg.) 1.4865; aldehyde content (calcd. as citral) 8 per cent; total solids 11.6 per cent; clearly sol. at 20 deg. in 95 per cent alc., not clearly sol. in 10 vols. 90 per cent; optical rotation of the 10 per cent distillate (at 20 deg.) 50°54′; n. of the 10 per cent distillate (at 20 deg.) 1.6834; odor and flavor characteristic, full and rich. (Through *C. A.*, **39**, *2160, 1945.*)

Packaging PORTFOLIO

HERB FARM SHOP

HERB FARM SHOP: A scented powdered perfume in Night Scented Stock fragrance is now provided by Herb Farm Shop. The new body sachet perfumes the skin, or may be sprinkled into dresser drawers. Its delicate flesh tone shows through the gift bottle in contrast to the blue of the ribbon bow, cap and label.

PRINCE MATCHABELLI

PRINCE MATCHABELLI: Three little bottles in a row is Prince Matchabelli's Three of Hearts package. There's Potpourri, Gypsy Patteran and Holly Berry. The trio is in a Valentine gift box of a lovely soft blue bowed with cerise ribbon and significantly featuring a three of hearts.

COTY: Three-in-one presentation—a cellophane case containing Coty's new plastic, loose powder compact in tortoise shell coloring with bevelled sides and clasp, a flacon of any one of the Coty classics, L'Origan, L'Aimant, Emeraude or Paris, stoppered in red, and a matching red plastic lipstick. A wide satin ribbon holds these in place on a white satin sachet pillow edged with lace.

ESMÉ OF PARIS

ESMÉ OF PARIS: The fragrance Green Eyes by Esmé of Paris is pictured with its lighter concentrate, Green Eyes Spray Perfume. The perfume has a new container designed by Esmé—black and silver marble whirls over a green background.

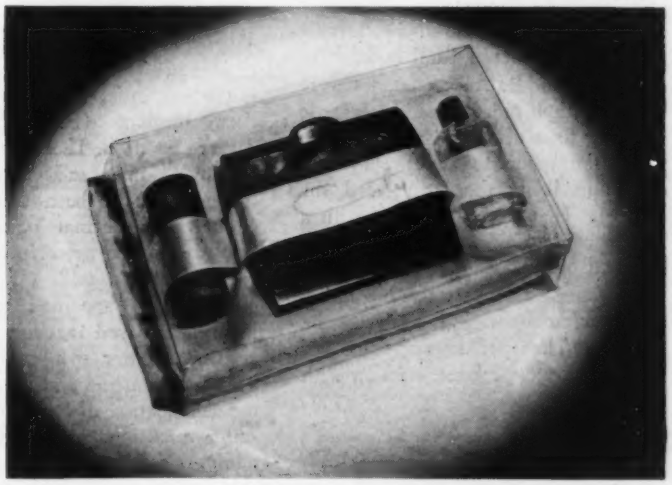
WILLIAMS

PRINCE MATCHABELLI: Prince Matchabelli's little Perfume Hat Box, light and gay looking, topped with white veiling and cerise bows contains two miniature crowns of perfume, Duchess of York and Katherine the Great.

WILLIAMS: The new Tenite plastic container for the Williams Shaving Stick is neat and clean-looking. The holder top is shiny red Tenite. The white screw-type base, in which the stick is fixed, has a rough gripping edge to make the unit easy to manipulate, even when the hands are wet.

COTY

PRINCE MATCHABELLI



The Value of Milk in Cosmetics

The modern science of cosmetics makes use of formulas based on whole milk, skimmed milk or milk salts which act as a skin food and beautifier

by DR. HENRY GOLDSCHMIEDT

COSMETICS were used on a large scale by the ladies of old Rome. Complete descriptions of the preparation and application of cosmetics are to be found in the literature of Catull, Ovid, Martial, Petronius, Lucian, and the details given add up to a startling picture of cosmetic practice in those days of the distant past.*

MILK AS A COSMETIC INGREDIENT

For the first time in history, this period employed milk as a basic cosmetics ingredient. A facial treatment consisted of a paste made up of bread crumbs and milk applied at night before retiring; this was removed in the morning by washing with an emulsion of milk and water. Empress Popeia, Nero's wife, is credited with the development of a beauty paste made by kneading rye flour with donkey milk. She used it daily and removed the mask by washing with warm cow's milk. According to contemporary reports, Popeia also invented the famous strawberry beauty cream prepared by mixing crushed strawberries and milk.

In the Middle Ages pomades were largely employed. These were made up of a base of stewed apples which gave the name to the preparation (pomum being the latin word for apple). This base was mixed with a salve containing butter, wax, and almond oil.

In the 15th century the beginning of a perfumery trade in Italy can be traced. The perfumery trade of France developed later, starting with the appearance of Rene, an Italian perfumer, at the French court, it came to a peak in the era of Louis XV (La cour parfumée). At this time in old Rome, milk was extensively used in cosmetics. Beautiful Ninon de Lenclos used strawberry cream and bathed in milk and champagne.

At the court of Queen Elizabeth of England, a well known method used to acquire an attractive complexion consisted of a hot bath to open the pores and subsequent application of milk preparations.

At the beginning of the 19th century it was assumed that Empress Josephine, Napoleon's wife, owed her glamorous complexion to a cosmetic prepared by pouring boiling milk over violets. She used the same fragrant preparation for her bath.

Even the modern science of cosmetics makes use of several formulas prepared with milk. The formulas used are based on either whole milk, skimmed milk, or milk salts.

WHOLE MILK FORMULAS

Among the preparations containing whole milk, the German Milkoderm products (Bruck, Hamburg) deserve mention. These formulations, employing milk and cream as base materials, have been found useful enough for dermatological indications. Another prescription of this type is lanolin milk (H. Paschkes, Vienna). A specified amount of lanolin is stirred together with milk, so that a very soft cream results. This leaves a fine and almost imperceptible coating of fat on the skin. A stable emulsion can be obtained by adding a small amount of soap to the same formula. The principal advantage of using lanolin is that this organic fat does not become rancid. Through tests made by Paschkes and Liebreich it has been found that an emulsion of this type has the advantage of perfect resorption.

The handbook of Beauty and Health by Lois Leeds contains the following massage lotion:

6	teaspoonsful of milk (sweet or sour)
1½	oz. glycerin
2	teaspoonsful tincture of benzoin
6	oz. distilled water
1	oz. rose spirit
1	teaspoonful tincture of musk

SKIMMED MILK PREPARATIONS

Other authors maintain that the advantages offered by the use of milk in cosmetics are not due to the content of butterfat. In addition, the fat contained in whole milk may cause rancidity. This is why they recommend skimmed milk, instead of whole milk, for use in cosmetics.

At present, the butterfat's tendency to become rancid can no more be considered a decisive point, since we are able to exclude the disintegration of organic fats by the addition of stabilizers.

The scientific American Cyclopedia of Formulas (Hopkins) contains the following recipes:

MASSAGE CREAM FORMULAS

Formula 1—Milk, skimmed, free from fat 2 gal., powdered borax 1 oz., boric acid 1½ oz., pulverized alum 4 oz., carmine coloring q.s., perfume q.s.

* See also: Constantin James "Toilette d'une Romaine au Temps d'Auguste et les Conseils a une Parisienne sur les cosmetiques"; Paris, Garnier Frères.

Dissolve the boric acid, alum, coloring and perfume in water, add the milk and set on fire, being careful not to burn or scald the milk. After the casein is precipitated and the whey shows clear, strain through cheese cloth. Do not let it get too dry. Then put into the ario-emulsifier and beat up. This fluffs it up, breaks up all the granular particles of casein, makes a beautiful smooth cream. If too thick, a small quantity of boiled water can be added and the whole can then be beaten again in the machine.

Formula 2—Skimmed milk 2 pts., powdered alum 6 dr., boric acid 4 dr., borax 6 dr., 95 per cent phenol 6 drop, oil of rose geranium, oil of bitter almond, solution of carmine and water: q.s.—Heat the milk to 130 deg. F., add the alum to one oz. of water and heat the same temperature; add the boric acid to 2½ oz. of water and bring to the same degree of heat; mix the milk and the boric acid solution while warm and add the alum solution, also warm. After the milk has curdled, strain it and if not clear add more alum solution; when all the casein has been gathered, add the phenol and q.s. of oils to perfume, and a little carmine to tint.

The Pharmaceutical Recipe Book of the American Pharmaceutical Association contains the following formulas for massage creams prepared with skimmed milk:

Formula 1—Skimmed milk, 1280 cc.; solution of formaldehyde, 1.25 cc.; sodium borate in fine powder form, 22 cc.; alum, 40 cc.; sodium benzoate, 20 cc.; boric acid, 45 cc.; distilled water, 200 cc.; perfume and color as desired.

Formula 2—Skimmed milk, 920 cc.; sodium borate, 21 cc.; boric acid, 21 cc.; sodium benzoate, 4 cc.; tartaric acid, 50 cc.; glycerin, 15 cc.; perfume and color as desired.

MILK COMPONENT PREPARATIONS

The essential components of milk are butterfat, protein, milk, sugar, serum (water) and salts. Several scientists have put forward the opinion that the development of modern chemistry makes it unnecessary to employ milk in more or less complicated processes; instead of that they promote the incorporation of cosmetically efficient milk ingredients into newly formulated compounds. A few formulas employing milk protein, milk sugar and salts illustrate this trend. Here, mention should be made of the Fissan preparation made of milk proteins alone.

ARTIFICIAL MILK FORMULAS

A group of artificial milk formulas is given in Winter's Handbuch der Gesamten Parfumerie und Kosmetik. This milk powder composed of chemicals dissolved in water is supposed to substitute for cow's milk as a means to improve the complexion.

Formula 1—Sodium chloride, 2 parts; calcium lactate, 5 parts; iron sulfate, 1 part; sodium bicarbonate, 8; sodium phosphate, 25; milk sugar, 500 parts: A whole egg is beaten into one-half litre of warm water, and one tablespoonful of this powder dissolved in the liquid thus obtained.

Formula 2—Casein, 10 parts; potash, 2; sodium bicarbonate, 90; musk, 0.1; lemon oil, 0.5, coumarin, 0.1: This powder is dissolved in water and used as a toilet water.

Other successful products derived from milk components are the Fissan preparations which are made of milk protein and several creams based on milk casein. Henley's 20th century book of formulas contains the following recipes and directions:

CASEIN MASSAGE CREAM

The basis of the modern massage cream is casein. This is now produced very cheaply in powdered form, and by treatment with glycerin and perfumes it is possible to turn out a satisfactory cream. The following formula is suggested:

Skimmed milk, 1 gal.; water of ammonia, 1 oz.; acetic acid, 1 oz.; oils of rose geranium and bitter almond, 1 drachm. each; oil of anise, 2 drachms; cold cream and carmine in sufficient quantities.

Add the water of ammonia to the milk and let it stand 24 hours; then add the acetic acid and let it stand another 24 hours. Then strain through cheese cloth and add the oils. Work this thoroughly in a wedgwood mortar adding enough carmine to color it delicate pink. To the product thus obtained add an equal amount of cold cream made according to the following formula:

White wax, 4 oz.; spermaceti, 4 oz.; white petrolatum, 12 oz.; rose water, 14 oz.; borax, 80 grains.

Melt the wax, spermaceti and petrolatum together over a water bath, dissolve the borax in the rose water and add to the melted wax at one time. Agitate violently. The borax solution should be of the same temperature as the melted mass.

GLYCERIN CREAM

Glycerin, 1 oz.; borax, 2 drachms.; boric acid, 1 drachm.; oil of rose geranium, 30 drops; oil of bitter almonds, 15 drops; milk, one gallon: Heat the milk until it curdles and allow it to stand 12 hours. Strain it through cheese cloth and allow it to stand again for 12 hours. Mix in the salts and glycerin and triturate in a mortar, finally adding the colors and perfumes, if desired. The curdled milk must be entirely free of water to avoid separation. If the milk will not curdle fast enough, the addition of 1 oz. of ammonia water to one gallon will hasten it. Take 1 gal. milk, add 1 oz. ammonia water, heat (not boil), allow to stand 24 hours, and no trouble will be found in forming a good base for the cream.

Lactic acid is another milk component used in cosmetic preparations. A product called Taxilan (Scholz, Koenigsberg) includes lactic acid and sour milk. This preparation has a pH of 3.7 and is intended for the acid treatment of the skin.

All these applications prove that milk has been valued as a top-ranking cosmetic from antiquity up to the present. Science has nothing better than milk to recommend to modern ladies eager to maintain their clear and youthful complexion. For milk is a natural product in its composition and genesis. It includes all the beneficial lactogenic hormones and it is extraordinarily adequate for the human skin as a vehicle for cosmetic components and ingredients.

BUTTERFAT NOURISHES THE SKIN

Milk is a simple emulsion stabilized as such by its content of colloidal casein. The most efficient components of milk are butterfat and protein. Therefore, milk contains the basic compounds necessary for building up organic cells, namely fat and protein. Butterfat is present in a multitude of tiny globules. It is estimated that a single drop of average milk contains about 100,000,000 fat globules. Their light reflectancy causes the milk to appear as a white-

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colored, opaque liquid. These small fat globules penetrate into the skin and are considered highly important for skin nutrition.

The presence of protein increases the adequacy for the skin. This adequacy is probably due to the better ionization and better conductivity of the protein components. The milk proteins are in a highly colloidal form, in a form which is apt to be split chemically. This splitting may go down to the smallest particles, namely to the albumen molecule and it may even be stopped in every stage.

SKIN ABSORBS FAT AND PROTEIN

Thus, it becomes clear that the organic emulsion of milk protein and fat is completely absorbed by the skin and, at the same time, appears to have a nutritive value. The colloidal milk protein is able to absorb at the same time the surplus acids and alkalis on the skin surface. Dermatologists using sour milk or buttermilk for cosmetic applications have based their prescriptions on the fact that the human skin has a sour reaction and a pH ranging between 3.0 and 5.0 (Heuss, Memmesheimer, Schade). A strong sour reaction of the skin surface stops the development of bacteria. It is not limited to the surface but extends deep into the horn layers and the top layers of the Rete Malpighi. It is obvious that the acid content is of primary importance for the horn formation of the skin.

Thus, cosmetics based on buttermilk and sour milk which have been sufficiently stabilized exert a bacteriostatic and fungicidal action and help to accelerate the process of horn formation.

SKIN ELASTICITY INDICATOR

In order to check the rate of penetration of a cosmetic cream or cream rouge, or lipstick, into the upper layers of the skin I have developed a little apparatus, or indicator. This apparatus permits measuring the elasticity or softness of the skin; its elasticity after the application of a cream, lipstick or rouge, and the speed at which elasticity increases, i.e., the time necessary for penetration. Thus, I have been able to observe that the softening effect of milk-containing preparations became obvious in less time than the softening resulting from the use of non-milk preparations. This apparatus and the exact results obtained by its use will be discussed in another paper.

The material and data given above illustrate the merit of modern creams, lotions and treatments based on milk as the raw material. Milk is an emulsion which has to be converted into another emulsion. The milk products used must be stabilized and only specific preservatives can be included in their use.

During the war, milk was exclusively used for its food value. Now, with ample supplies of food becoming available, we may look to milk once again as a skin food and beautifier, and we may expect a new trend to utilize whole milk in scientific cosmetic products.

The Toilet

A very curious industry in Paris, and one that is more extensive than might be supposed from its nature, is that of paints, pencils and powders for making up the complexion. Most of the great perfumers, such as Guerlain, Pirer, etc., have a back room to their shops, especially devoted to this mysterious commerce. The ordinary method of daubing the face, first with a white paint, and then with rouge, finds no favor with the consummate artists who teach the use of the beautifying compounds. For whitening the skin, a preparation is shown that is composed of some insoluble powder in a liquid. The bottle must first be well shaken, and a very small quantity of its contents must then be taken on a fine old linen rag or bit of cotton, and rubbed round and round till the preparation has penetrated the skin thoroughly. This wash makes a complexion beautifully white without a trace of the flouriness which the use of powder or ordinary paint usually leaves.

It is very costly, being sold at $12 for a small bottle-full. Next comes the rouge, which is also very costly, being valued at $18 for a box of the best quality. From this superfine article, the grades descend through different prices, till we reach the coarse sixty-cent rouge, which no well-bred beauty would condescend to use. Different shades of rouge are sold for different occasions. There is a shade for daylight, one for the theatre, one for the ball-room, one for the race-course, etc. Then we have a scarlet liquid, used for coloring the lips, and a black powder which is used for blackening the edges of the eyelid.

This last requires some dexterity in its use, as it must be put on as a powder, and then delicately "washed in" with a fine old linen rag and lukewarm water.

Black and brown pencils are used for marking the arch of the eye heavy, and a pencil of delicatest blue for tracing the veins on the white surface of the painted skin.—*Peterson's Magazine, October, 1876.*

Letter to the Editor

Editor of THE AMERICAN PERFUMER:

We have read with great interest the article by R. W. Moncrieff entitled "A New Animal Fixative May Appear" in your issue of December, 1945. This is certainly an interesting piece of work, and we should like to commend both Mr. Moncrieff and yourself for making this information available.

At the same time, we should like to point out that although Mr. Moncrieff has reviewed in some detail the products now obtainable for perfumery from various animals, he completely omitted mention of the very interesting work which has been done on muskrat. This work has been described in some detail in such publications as *The Journal of the American Chemical Society*, THE AMERICAN PERFUMER AND ESSENTIAL OIL REVIEW, *Drug and Cosmetic Industry*, *The Givaudanian*, and in my recent book, "The Science and Art of Perfumery." The process for the preparation of the natural musk product from the muskrat has been patented and the process is no longer in the experimental stage inasmuch as Givaudan-Delawanna, Inc., has marketed this musk under the name of Musc Zibata.

In view of Mr. Moncrieff's interest in animal fixatives which contain macrocyclic ketones, your readers would be particularly interested in knowing that Musc Zibata contains principally cyclopentadecanone and cycloheptadecanone.

Sincerely yours,
Edward Sagarin

Survey of Recent Cosmetic Patents

Registered Agent before the U. S. Patent Office discusses U. S. and foreign patents . . . Any inquiries relating to patents and trade marks will be met with prompt attention

by I. J. FELLNER, PH.D.

Hair dyeing compound. Franz Stroeher, Germany. *German 739,628, Nov. 2, 1943.* The preparation contains difficultly soluble aromatic diamines in conjunction with alkali salts of condensation products of disintegrated protein such as lysalbinic or protalbinic acid and higher fatty acids. Example: 6 parts of pp'-diamino-diphenylamine are dissolved in 100 cc of acetin, and are added with 50 cc of an alkali salt of the condensation product of lysalbinic or protalbinic acid with higher fatty acids and 100 cc of water. The thus obtained solution may be diluted with water without precipitating the base.

Antiseptic composition. M. Mendelsohn, New York, N. Y. *U. S. 2,386,252, Oct. 9, 1945.* An iodine releasing composition includes a water soluble iodine, a water soluble iodate, an agent for stabilizing the reaction between iodine and iodate, a water a water soluble acid carbonate, all in soluble neutral orthophosphate, and quantities as to produce a substantially neutral composition.

Treating fats and fatty oils. Colgate-Palmolive-Peet Co., Jersey City, N. J. *U. S. 2,383,601, August 28, 1945.* A fatty glyceride containing free fatty acid is treated with low molecular weight monohydric alcohol in the presence of an acidic esterification catalyst. The reacted fatty glyceride is then treated with low molecular weight monohydric alcohol in the presence of sufficient alkali to neutralize any acid present and to provide an alkaline alcoholysis catalyst, whereby a liquid body containing an ester of fatty acid from said glyceride with said alcohol is produced, with glycerine being formed as a by-product. The ester and the glycerine are recovered from the liquid body.

Floating soap. Ch. W. Kelly, Sumrall, Miss. *Canadian 429,508, August 21, 1945.* A perfumed hard cake of milled soap containing an acid is converted into a hard cake of buoyant milled soap without changing the formula of the soap by reducing the soap to a fluid mass by boiling, adding thereto sodium bicarbonate and stirring, the distribution and amount of the sodium bicarbonate being such that its reaction with the acid will liberate minute portions of carbon dioxide scattered throughout the mass to produce minute cells in sufficient quantity to render the cake buoyant, and finally cooling and shaping the mass with the cells therein.

Preparation of limonene. Research Corp., New York, N. Y. *U. S. 2,382,641, August 14, 1945.* The process for the production of limonene which comprises heating pinene with an organic acid in the presence of an organic acid amide.

Stabilizing fats, oils, waxes and the like. N. V. Ned. Research Centrale, Grafenhagen, Holland. *Dutch 55,811, Jan. 15, 1944.* 1000 parts of palm oil are treated for 5 hours with 0.2 per cent selenium in vacuo at a temperature of 210 deg. C. The material is filtered with a small amount of bleaching clay and may be converted into emulsions which will keep stable over a long period of time.

Foam baths. Leo Lowenstein, Berlin, Germany, Vested in the Alien Property Custodian. *U. S. 2,382,732, August 14, 1945.* A substantially stoichiometric mixture of crystallized aluminium sulfate, sodium bicarbonate of the proportion necessary to produce carbon dioxide, and a foam producing substance is added with solid small particles of a non-heat conducting substance chemically inert with regard to the other constituents in a quantity not in excess of 40 per cent by weight of the aluminium sulfate. Water is added only in such quantity as may be retained by the foam produced.

Cosmetic coating. S. Quisling, Madison, Wis. *U. S. 2,383,990, Sept. 4, 1945.* A non-tacky, water insoluble color cosmetic coating material for hair, skin, nails, and lips contains a major portion of prolamine plastic base material having a relatively small amount of water soluble extending material and a finely divided pigment material suspended therein.

Soapless detergent. Procter & Gamble Co., Cincinnati, Ohio. *U. S. 2,383,502, August 28, 1945.* As a new washing composition of improved washing efficiency use is made of an anion active soapless synthetic surface active organic compound suitable as a washing agent in aqueous solution, mixed with an alkali metal acid triphosphate of the general formula:

$$M_xH_5 - {}_xP_3O_{10}$$

wherein M is an alkali metal, x has a value between 5 and 3, and having a pH in dilute aqueous solution less than 9.5 but not less than 5.

FLAVORS

Compounding of Flavor Ester Mixtures

The compounding and formulation of flavors is as much an art as it is a science

by MORRIS B. JACOBS, Ph.D.
Adjunct Professor of Chemical Engineering, Polytechnic Institute of Brooklyn

IT is very likely true that the compounding of flavor ester mixtures is as much an art as it is a science. According to some connoisseurs the addition of a single excess drop of a strong flavoring material may spoil a flavor composition just as a single excess drop of perfume components may ruin a perfume formulation. This opinion is probably somewhat exaggerated but it does serve to emphasize the need of care and accuracy in the preparation of these flavor mixtures.

COMMON FAILURES

Persons, even chemists, who have had little experience in the compounding of flavor ester mixtures are prone to underestimate the strength of many synthetic flavoring materials and natural essential oils. Consequently they have a tendency to add too much of such materials to their compositions.

Another common failure is to fail to note the differences in aroma strength, that is the aroma quality, of certain raw materials so that it becomes difficult to duplicate successful formulations merely by using similar quantities of these raw materials. This used to be more of a problem in the past than it is at present because of better standardization in existence now. It was also much more of a problem with natural than with synthetic materials since the former are more difficult to prepare in uniform quality.

SMALL-SCALE EXPERIMENTS

In order to overcome these difficulties, it is best to make small-scale experimental batches, noting the exact proportions of each component used. By variation of the formula with such small-scale trials, the changes to be made in the preparation of the commercial scale batch will become apparent. The ability to reproduce the same flavor effect from materials which differ in quality, as well as the formulation of entirely new flavor effects is undoubtedly an art.

ROLE OF FLAVOR COMPONENTS

Each flavor component has its role to play and a proper understanding of that role is part of the science of compounding. Natural flavors as well as synthetic materials enter into the components to be used.

Flavor ester mixtures are mixtures of flavoring materials. In order to simulate the flavor of natural flavoring materials, it is necessary to make an adequate blend of synthetic flavoring materials, for the natural materials are also blends. Thus a flavor ester mixture has a group of major ester components. These give the flavor its characteristic fruit or spice or other natural aroma or serve as the basis of that aroma. A small amount of a powerful flavoring material, generally a lactone, hydroxycinnamate, aldehyde or ketone with a similar characteristic aroma is often added to intensify the flavor. Modifying substances such as aldehydes, ketones, ethers, compounds with more than one functional group, and some esters also are added. Other components like terpene alcohols and esters of these alcohols are added to give nuance or tone to, or to lend a flowery note to the mixture, and still other components are added as fixatives so as to prevent uneven volatilization of the various components. All of these substances thus

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play their role in making the final blend really resemble the "true" fruit flavor.

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For instance, we can prepare a mixture of esters, with the following components, which can serve as a base for the preparation of characteristic flavor by the addition of powerful flavoring components. Such a "neutral" ester mixture can also serve as a diluent or as a supplementary ester mixture.

Component	*Parts*
Ethyl acetate	420
Amyl acetate	250
Ethyl formate	250
Amyl butyrate	80
Total	1000

BLENDING

In the early days of the synthetic flavor industry volatile substance like acetaldehyde and chloroform were incorporated to increase the strength of the flavor but this practice is not to be recommended. It is far preferable to use small amounts of flavoring materials, like ethyl phenylglycidate, so-called aldehyde C_{16}, with intense flavor power for this purpose.

PEACH FLAVOR ESTER MIXTURE

As an example of the use of the various components of a flavor ester mixture, let us take the following synthetic peach flavor:

Flavor Component	*Paris*
Cyclohexyl butyrate	600
Ethyl cinnamate	140
Benzyl butyrate	140
Isoamyl butyrate	70
Isobutyl salicylate	20
γ-Undecalactone	20
Geranyl formate	10
Total	1000

Dilute with 3 volumes of alcohol to make the essence.

The principal components: cyclohexyl butyrate, ethyl cinnamate, benzyl butyrate and isoamyl butyrate are the basis of the above peach flavor formula. γ-Undecalactone intensifies the fruity flavor giving it a characteristic peach aroma. Ethyl cinnamate and benzyl butyrate having relatively high boiling points serve, in addition, as fixatives; while isobutyl salicylate and geranyl formate give nuance by their flowery note. To make the essence, the flavor ester mixture may be diluted 1:3 with alcohol or other appropriate solvent.

Flavor ester mixtures vary from simple mixtures of two components, as for instance:

PINEAPPLE FLAVOR ESTER MIXTURE

Flavor Component	*Parts*
Ethyl butyrate	190
Isoamyl isovalerate	810
Total	1000

Dilute with 5 volumes of alcohol to make the essence.

To relatively complex compounded ester mixtures containing twelve, thirteen, and even more components as for example in the following formula:

RASPBERRY FLAVOR ESTER MIXTURE

Flavor Component	*Parts*
Isobutyl acetate	420
Isoamyl acetate	275
Ethyl acetate	200
Ethyl formate	35
Benzyl benzoate	25
Bromelia	15
Vanillin	10
Linaloöl	10
Eugenol	6
Benzyl acetate	2
Geraniol	1
Ionone	1
Total	1000

Dilute with 2 volumes of alcohol to make the essence.

It will be noted as in the instance of the peach flavor ester mixture cited that the principal components of the raspberry flavor ester mixture are the esters isobutyl acetate, isoamyl acetate, ethyl acetate and ethyl formate. Benzyl benzoate serves as the fixative. Modifying components are vanillin, bromelia and eugenol. Linaloöl, geraniol and benzyl acetate serve to lend a flowery note, and ionone serves to intensify the raspberry flavor.

Flavored Notes

One method of preserving flavor essential oils is to add 95 per cent or absolute alcohol to the oil. The addition of alcohol in the ratio of 1/16 to ½ of the volume of the oil, roughly 30-240 ml. per pound of oil will generally prove adequate to prevent deterioration.

* * *

The Polytechnic Institute of Brooklyn, Graduate School and Department of Chemical Engineering, (99 Livingston St., Brooklyn 2, N. Y.) announces the opening of registration for a course on Food Colors, Flavors, and Synthetic Additives to be given in the Spring Semester 1946 by Dr. Morris B. Jacobs, Adjunct Professor of Chemical Engineering. Inquiries are invited.

* * *

Vanilla as a flavoring component has a truly historical background. Vanilla beans and extracts of these beans were first used by the white race at the time of the conquest of Mexico by Cortez.—*M.B.J.*

Sugar Stocks in Java

The War Department has notified Secretary of Agriculture Clinton P. Anderson that U. S. army authorities in the Pacific area have confirmed the existence of sugar stocks in Java. About six weeks ago an estimate of 1,600,000 short tons was reported for Java supplies. Current estimates from Army sources place the amount of sugar now in bags in Java at about 1,000,000 metric tons. An additional 400,000 metric tons are reported by Dutch authorities to be in bins. This total is equivalent to 1,600,000 short tons.

Secretary Anderson warned that, because of internal difficulties in Java, it is impossible to forecast when the sugar will be available for export.

It is reported that production in Java has declined steadily during the war years with only 500,000 tons produced in 1944.

The sugar factories on the Java plantations are in bad condition, says the Netherlands Information Bureau, owing to the lack of proper management. Out of 80 sugar mills on Java, only *one* remained in continuous operation during the war. The remainder were converted to the production of ammunition, alcohol, and vitamins for the Japanese. To bring these mills back to their former production, speedy delivery of machinery from the United States and Britain is essential.

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INDISPENSABLE TO INDUSTRY

Madagascar Vanilla-Beans

Vanilla-bean production in Madagascar during 1945 amounted to about 280 metric tons, or about 11 per cent more than the 252 tons produced in 1944, although acreage in 1945 amounted to only 29,652 acres as compared with 39,536 acres in 1944. The increased crop in 1945 is attributed to the brighter shipping outlook which has caused the producers to cultivate more intensively.

About 98 per cent of Madagascar's 1945 vanilla-bean crop will be exported. Local consumption is small as there are no extract factories in Madagascar.

Exports of vanilla beans in 1944 totaled 360.6 net metric tons of vanilla beans as against 107.1 net metric tons exported in 1943. The reason for the inrease in exports is that in 1944 Madagascar exported stocks held over from 1941 and 1942, as well as stocks produced in 1943. Vanilla beans are harvested during May, June, and July, and are cured for about 6 months.

In January 1943, the blockade was lifted, thus permitting the resumption of trade.

Stocks on hand on August 20, 1945, were estimated at 279 net metric tons, of which only about 79 metric tons were fit for export as the remainder, including old stocks held over since 1941, had become mildewed and rancid.

Wholesale prices for vanilla beans in Madagascar are fairly stable, because the controlled export prices practically eliminate fluctuations. Current wholesale prices according to grade are as follows: Grade one, 400 francs per kilogram (1 kilogram equals 2.2046 pounds), equal to $3.66 U. S. currency per pound; Grade two, 310 francs per kilogram, equal to $2.84 per pound; Grade three, 275 francs per kilogram, equal to $2.52 per pound.

Price control is enforced through the medium of granting export licenses. The government refuses to issue export licenses to all brokers, commission agents, exporters, and other buyers who contract to sell vanilla beans below the fixed minimum export prices.

The market situation in August showed no marked changes when compared with previous years. It appeared that "pegged" prices guaranteed sufficient margins for producers, and it was expected that they would supply the market with available stocks. There were no commitments, either foreign or domestic, that could have had any effect on this commodity.

With the end of the war and the resumption of shipping on normal trade routes the outlook for the vanilla industry in Madagascar appears bright. Trade activity with continental France will increase; nevertheless exporters are expressing a desire to continue direct trade with importers in the United States, who, during the emergency purchased more than 90 per cent of the exportable production. As long as the government does not force exporters to earmark quotas for France or other countries, it appears that importers in the United States will be in position to continue buying a large percentage of the vanilla beans produced in Madagascar.

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SOAPS

Stabilization of Oil-in-Water Emulsions

In the region studied, both soap-monoglyceride and synthetic detergent-monoglyceride gave more stable emulsions than any amount of soap or synthetic detergent alone†

by W. G. ALSOP and J. H. PERCY*

THE qualitative observation that monoglycerides and specifically the monoglyceride of coconut oil fatty acids are effective stabilizers for oil-in-water emulsion, but give peculiar and sometimes unpredictable results in formulations, led to the undertaking of a quantitative study of the phenomenon. This is a report on a preliminary phase of the investigation.

INSTABILITY OF EMULSIONS

From a cosmetician's point of view oil-in-water emulsions may show instability in two ways. The emulsion may break; that is, the dispersed droplets of oil may coalesce to form macro-droplets, which are visible as such or coalesce to form an upper layer of oil if there is sufficient density difference between the oil and water phases. This is true instability as defined by the physical chemist.

Alternatively, the emulsion may cream, showing a clear or cloudy lower aqueous layer without any apparent coalescence of the oil droplets. Depending upon circumstances, creaming may or may not be a result of partial coalescence of droplets to form larger droplets which are still emulsified. While creaming is not accepted as a sign of instability by the physical chemist, it is nevertheless very important in actual practice. In some emulsions both types of instability may appear.

The object of this investigation was to cover a range of concentrations of monoglyceride and soap or synthetic detergent, keeping other conditions constant, and determine how the monoglyceride present affected the two outward aspects of emulsion stability.

A cosmetic mineral oil of medium viscosity was chosen as a standard oil phase relatively difficult to emulsify.

EXPERIMENTAL MATERIALS

The mineral oil used was standard medium viscosity cosmetic mineral oil, specific gravity 0.845, viscosity 85 sec. S. U. at 100 deg. F.

The soap was a standard potassium coconut oil soap which was chosen to eliminate, as far as possible, viscosity effects at higher soap concentrations.

The monoglyceride was a commercial product of the following composition:

Monoglyceride of coconut fatty acids	58%
Diglyceride of coconut fatty acids	14%
Triglyceride of coconut fatty acids	2%
Free fatty acid	1%
Glycerol	25%

The concentrations of monoglyceride reported in this paper are based on this material, so that the actual concentration of glycerol-free fatty material present in each experiment was 75 per cent of the nominal amount.

The wetting agent was a commercial product containing 35 per cent active ingredient and 65 per cent sodium sulfate, the active ingredient being the sodium salt of sulfated coconut oil monoglyceride.

To facilitate observation of emulsion breakdown, the oil and water phases were dyed, the oil layer containing 0.001 per cent of oil yellow

* Colgate-Palmolive-Peet Co.

† This paper was presented before the Scientific Section of the Toilet Goods Association.

TABLE I
MINERAL OIL-WATER-MONOGLYCERIDE-SOAP
Separation after 18 hours at 25°

% Mono-glyceride	% Soap		0%	0.01%	0.025%	0.050%	0.075%	0.10%	0.25%	0.50%	0.75%	1.0%	3.0%
0%		W	250	235	245	237	185	175	185	185	170	170	130
		O	250	250	220	230	80	20	10	0	0	0	0
0.5%		W	225	60	85	100	110	145	160	170	158	155	135
		O	240	15	5	5	0	0	0	0	0	0	0
1.0%		W	190	30	30	40	20	60	160	150	160	150	125
		O	230	15	5	0	0	5	0	0	0	0	0
2.0%		W	15*	15	5	3	7	0	140	140	130	130	95
		O	150*	0	0	0	0	5	0	0	0	0	0
4.0%		W	0*	0*	0	0	0	0	0	20	90	95	50
		O	90*	95*	0	0	0	0	0	0	0	0	0

W = ml. water phase separated
O = ml. oil phase separated
* = water-in-oil emulsion
*} = wholly water-in-oil emulsion

TABLE II
MINERAL OIL-WATER-MONOGLYCERIDE-SYNTHETIC DETERGENT
Separation after 18 hours at 25°

% Mono-glyceride	% Synthetic Detergent		0%	0.01%	0.025%	0.050%	0.075%	0.10%	0.25%	0.50%	0.75%	1.0%	3.0%
0%		W	250	240	170	175	170	168	180	180	180	190	180
		O	250	250	10	2	0	0	0	0	0	0	0
0.5%		W	150	170	120	110	100	100	160	170	180	185	165
		O	260	150	0	0	0	0	0	0	0	0	0
1.0%		W	180	20	30	35	30	40	30	120	150	155	142
		O	200	0	0	0	0	0	0	10	0	0	0
2.0%		W	170	130	90	0	20	15	90	150	220	250	190
		O	180	10	10	0	0	5	0	20	260	250	0
3.0%		W	*	0*	0*	*	30	20	10	210	250	240	135
		O	120	100	100	90	15	10	180 70 oil	240	250	230	10
4.0%		W	0*	0*	0*	0*	0*	45	200	100	80	170	265
		O	100	100	70	50	60	145	210	220	200 170*	220 20*	235

W = ml. water phase separated
O = ml. oil phase separated
* = water-in-oil emulsion
*} = wholly water-in-oil emulsion

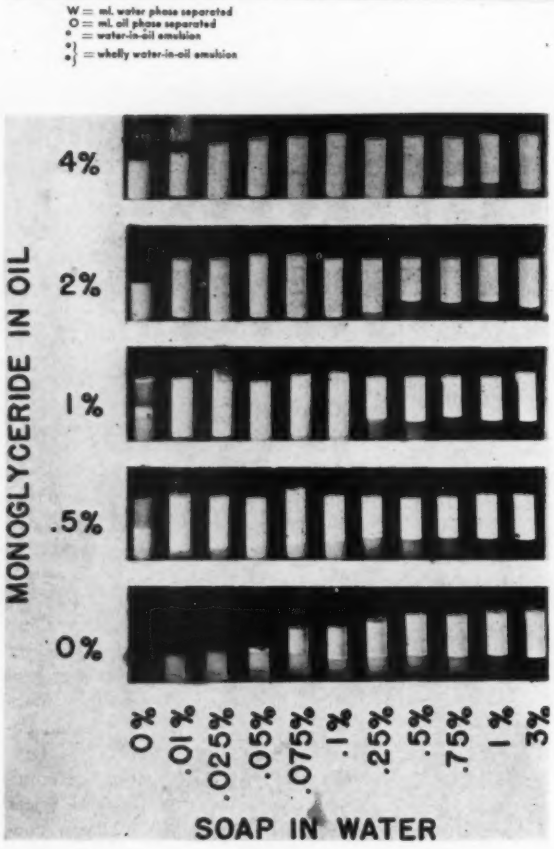

Figure 1

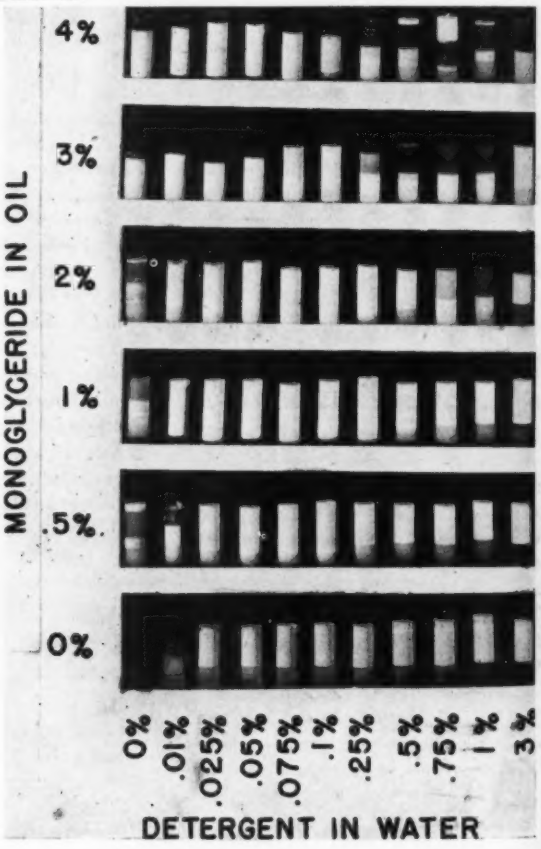

Figure 2

and the water layer 0.0003 per cent of methylene blue.

PROCEDURE

Two hundred and fifty milliliters of mineral oil containing the desired concentration of monoglyceride was added to 250 ml. of distilled water with the desired concentration of soap or wetting agent in a one-liter beaker, all at 25 deg. C. After stirring for 120 seconds, the mixture was transferred to a liter graduated cylinder, covered, and allowed to stand at 25 deg. C. for 18 hours, after which it was observed and the volumes of separated oil layer and aqueous layer, if any, recorded.

The stirrer was a laboratory-size Eppenbach Homo-Mixer in fixed position one-half inch above the bottom of the beaker and with the baffle plate set as low as possible; the speed was controlled by a series resistance of 34 ohms.

DISCUSSION OF RESULTS

Table I shows the results obtained with soap and Table II those obtained with wetting agent. Repeat de-

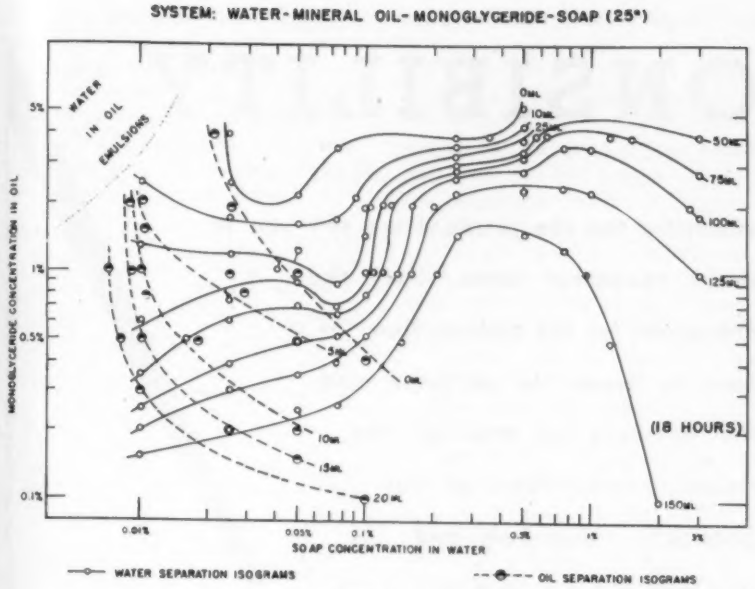

Figure 3

terminations of several points in the table indicate that if the temperature of aging is controlled fairly closely, the values of separated water or oil layer are reproducible to about 20 ml. or 50 per cent, whichever is smaller.

Preliminary experiments showed very little difference between eighteen hours' aging time and longer periods, up to a week.

Figures 1 and 2 are actual photographs of the emulsions after about twenty hours.

It can be seen that with any amount of soap or wetting agent tried, creaming was almost complete when monoglyceride was not present. With a small amount of monoglyceride, small amounts of soap or wetting agent gave quite stable emulsions.

Examination of the data indicates that while there is a pattern of regularity, the relations are not simple. In order to get a complete picture of the region explored, isogrammatic plots were made, as shown in Figures 3 and 4.

In Figure 3 original concentration of monoglyceride in the oil phase is plotted vertically and original concentration of soap in the water phase horizontally, both on logarithmic scales. The solid lines represent points of equal creaming tendency; that is, every point on the line marked "75 ml" represents a composition that would cream to give 75 ml. of aqueous phase. (The circles shown are not experimental points, but derived points read by interpolation from smooth curves drawn for each column and line in Tables I and II.)

The dotted lines similarly represent points of equal oil separation. It appears from this plot that increasing either monoglyceride or soap concentration tends to reduce coalescence.

However, this is not true for creaming. With a given amount of monoglyceride, increasing the soap concentration first decreases creaming, then increases it, and there are indications that further increase will reduce it again. In other words, there is an optimum soap concentration in the low range for maximum stability. As the monoglyceride concentration increases beyond 3 per cent, there is a tendency to form water-in-oil emulsions, which appear to be overcome by increasing the soap concentration.

Figure 4 is the same type of plot for the synthetic detergent. It follows the same general lines as the other, but with some differences. The region of best emulsification is not so sharply defined. The oil separation lines come down at the right, indicating that in certain regions an increase of wetting agent concentration can increase coalescence. The water-in-oil-region spreads out farther. In this plot also, there is indication that emulsification improves again beyond the righthand boundary. Some of the differences from the soap plot may be due to the presence of the strong electrolyte, sodium sulfate, in the solution.

The multiple peak to the left of center in the detergent plot represents the actual results as we have interpreted them. It is possible to show a different structure with the points obtained, and variation in results well within the experimental error would alter the fine structure of the contours considerably. However, the broad picture of a large flattish peak in this region is probably correct.

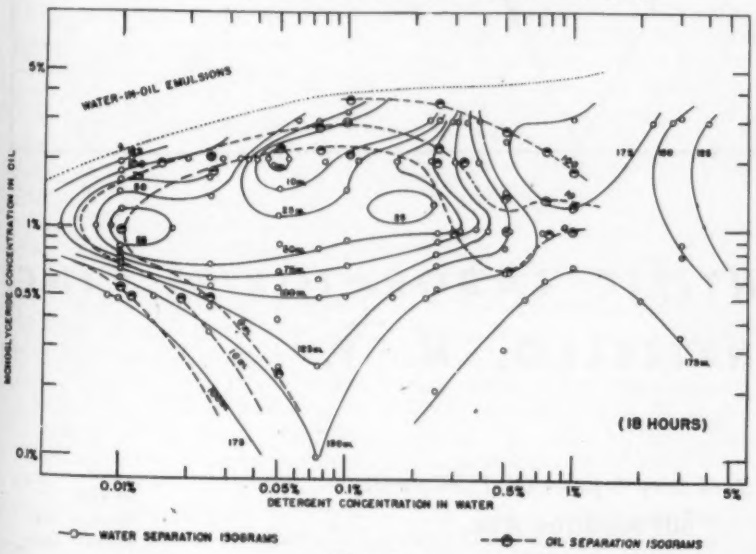

Figure 4

SUMMARY

A preliminary study is reported on stability of emulsions in the systems

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In the region studied both soap-monoglyceride and synthetic detergent-monoglyceride gave more stable emulsions that any amount of soap or synthetic detergent alone.

[1] Buckwalter, F. H. *Pro. Sci. Sect. T.G.A.*, No. 1, 22-24 (1943-44).
[2] Schultz and Goldberg, *Ind. Eng. Chem., Anal. Ed.*, 15, 155-158 (1943).
[3] Panouse-Pigeaud and Cheftel, *Ann. fals.*, 32 296-301 (1939).
[4] Fuchs and Soos, *Deut. Apoth.ztg.*, 56, 317-318 (1941).
[5] Vizern and Guillot, *Ann. Chim. Anal. Chim. Appl.*, 19, 258-260 (1937).
[6] Gray, *Ind. Eng. Chem., Anal. Ed.*, 14, 110-114 (1942).
[7] *Bull. Nat'l Form. Comm.*, 9, 119-124 (1941).
[8] Gangl and Liedl, *Mikrochemie, Festschr. von Hans Molisch*, 147-153 (1936).
[9] Clifford, *J.A.O.A.C.*, 21, 437-439 (1938).
[10] Perlman, *Ind. Eng. Chem., Anal. Ed.*, 10, 134-135 (1938).
[11] White, J., *Chem. Educ.*, 13, 369-373 (1936).
[12] Vastagh, Z., *Anal. Chem.*, 123, 279-292 (1942).

Civilian Soap Outlook Brightens

The immediate outlook for the civilian soap buyer has brightened considerably lately due to extensive cutbacks in Army purchases of soap. Thereafter the picture is not so bright, but promises to improve.

Figures indicating the extent to which the Army has reduced its buying of soap were released recently by Col. George F. Spann and James S. MacIntosh of the Jersey City Quartermaster Depot, Jersey City, N. Y. This is the depot where Army soap buying is centralized.

During the first three quarters of 1945, 291,335,000 pounds of ordinary issue soap were bought through the depot, whereas a requirement of 87,068,000 pounds for the fourth quarter has been cancelled. This order was to have been for the Army, Quartermaster and Medical Corps.

No purchases of branded toilet cake soap and packaged granulated soap have been made during the third and fourth quarter as purchases made during the second quarter were extended to cover the remainder of the year. Orders for 79,000,000 cakes of toilet soap, 2,700,000 packages of granulated soap, and 4,500,000 cakes of wrapped laundry soap were cancelled. It was further indicated that supplies on hand would be sufficient for the first half of 1946.

Almost 8,000,000 pounds of powdered soap were purchased during the first nine months of 1945, and 5,270,000 pounds of low titre laundry powder. No purchases in either category were made during the last quarter.

During the first half of 1945 a total of 4,515,250 pounds of chip or flake soap was purchased, none in the second half. No grit soap was bought during the last two quarters of 1945. No "all-purpose" soap was bought in the last quarter, and contracts for 11,171,000 cakes were terminated.

Thus, a considerable quantity of soap which was originally earmarked for the Army has been released.

The raw materials situation is not so bright. It was hoped that at least 25,000 tons of Philippine copra would reach the United States before the end of 1945. Latest reports were that we might not receive 5,000 tons. It is expected that by the middle of 1946 shipments will reach about 25,000 tons a month, reaching a total of 200,000 tons for the second half of the year.

Trade goods, an important item, have been arriving in increasing amounts. Sufficient bags have been made available to ship the copra, and the Government-sponsored corporation responsible for the program is developing trading facilities. The goal to be reached is a return to the pre-war level of shipment to 40,000 tons per month. The problem in the Philippines has been one of collection and marketing rather than one of basic supply.

New Procter & Gamble Plant

A new Procter & Gamble Co. plant is being planned to be located at Sandusky, Ohio. The new plant, which is to employ 300 to 400 men, will be constructed on a 30 acre plot. This will be the third new plant opened by Procter & Gamble since 1940. The others are located at Dallas, Texas, and Quincy, Ill.

Indian Mission's Report

N. R. Sarkar, Member of the International Mission, reported his findings of conditions in the United Kingdom and the United States upon his return to India at a luncheon given recently by the All-India Soapmakers' Association at which he was the chief guest.

Mr. Sarkar pointed out that the Mission did not go to Britain and the United States for consumers goods as India wishes to develop her own industries. It was rather to find out when capital goods would be available.

He found that both countries were anxious to help India according to their resources. The United States possesses larger resources and is in a position to offer goods at an earlier date, but English merchandise is not so expensive. English machinery was found to be not so up-to-date as that manufactured in the U. S.

As the entire world appears to be placing orders with the two countries, India was not given much hope of delivery in large quantities for two years.

Mr. Sarkar further said that from the little experience he had as a result of the tour, he would say that Indian industrialists and business men would have to re-orient their methods of organization, consult experts and prepare plans in more minute detail.

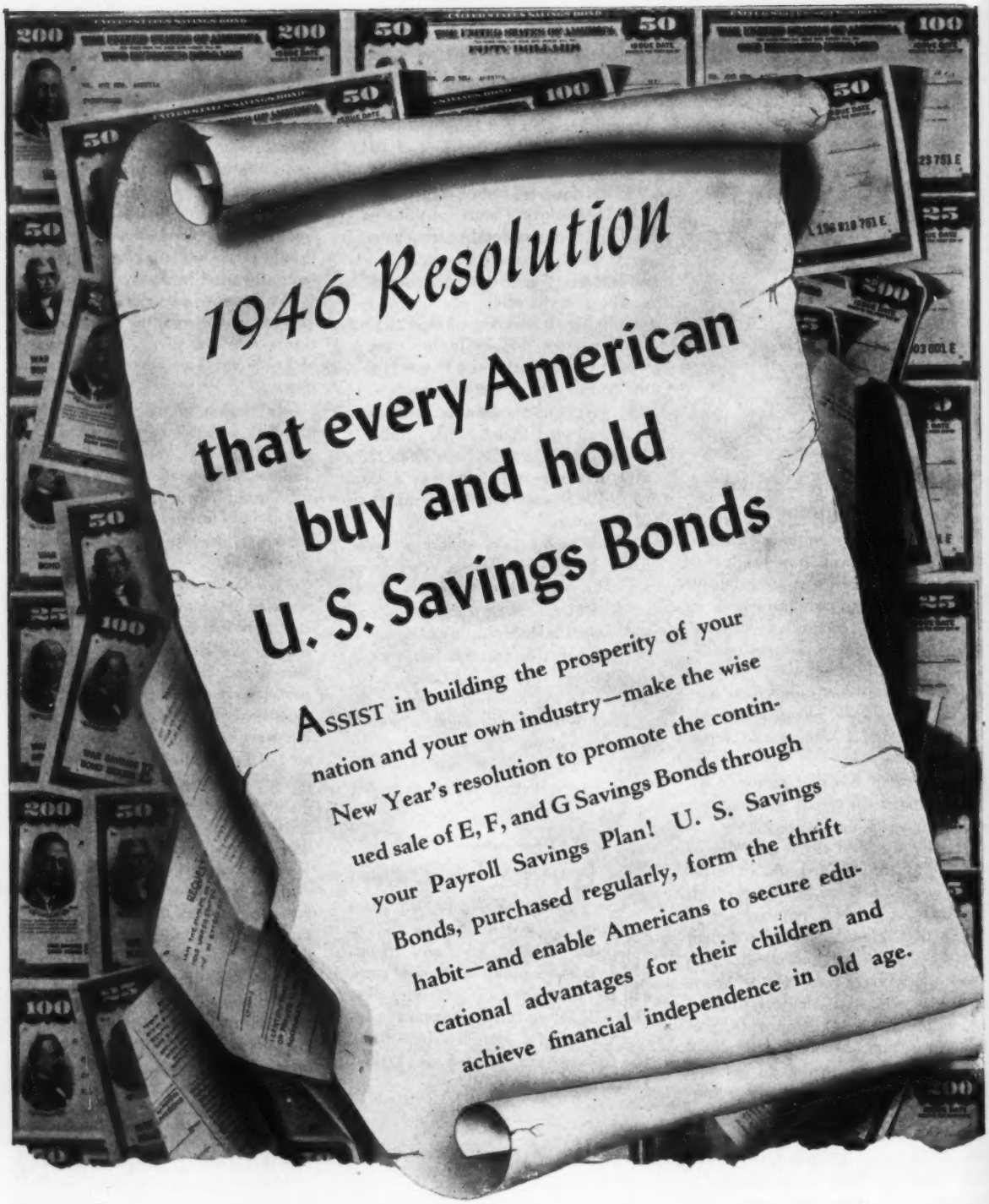
Mr. Sarkar laid emphasis on the need for developing scientific research and technical research and technical education. He said the delegation had found that in other countries, particularly in the United States, scientific research and technical training were greatly helped by the support of private industry. "It is time," he said, "our industrialists also contribute to the universities and other institutions so that scientific education may improve."

He stated that it was for India to develop its own staff of technical experts rather than to depend on bringing in individuals from other countries.

The All-India Soapmakers' Association came into existence in 1933. It maintains a scientific section for the purpose of helping members having technical problems and publishes the journal *The Indian Soap Journal.*

British Guiana Soap

Imports of common soap into British Guiana decreased from 3,281,188 pounds in 1943 to 972,063 pounds in 1944. On the other hand, exports of common soap increased from 500 pounds in 1943 to 212,450 pounds in 1944. Exports of toilet preparations increased to 44,268 gallons, valued at $248,426 (British Guiana dollars), from 21,760 gallons, valued at $103,056, in 1943.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by ARNOLD KRUCKMAN

THE reorganization of the Bureau of Foreign and Domestic Commerce, in Mr. Wallace's Department of Commerce, is important to the cosmetics, toiletries, and allied industries, because it alters the Pharmaceutical and Drugs Unit, which deals with toiletries, cosmetics and food oils and chemicals. Apparently it will cloak in anonymity everybody in the Unit except its head, who at present, is T. W. Delehanty. This means, at least until further adjustments have been made, the communications issued by the Unit, received by this industry, will not bear the well-known and very popular name of Lester A. Barber. Mr. Barber is in the same place and in the same important relation to the industry as he has always been, even though his name is temporarily blacked out. These incidents are examples of the peculiar idiosyncrasies of government which puzzle outsiders so much.

REORGANIZATION OF UNIT

The reorganization which has affected the Drugs and Pharmaceutical Unit apparently has more effectiveness on paper than in reality, at this time. Its chief impact currently is reflected in bewilderment and uncertainty. The real reorganization so eagerly sought by Mr. Wallace apparently cannot become actual until Mr. Wallace can induce Congress to give him enough money. It has supplied some funds, but not enough to accomplish the grandiose plans Mr. Wallace has in mind. It is generally presumed he will not know whether or not he can really do what he has in mind until next June. If he can coax the Appropriations Committee of the House to give him the funds, he can do things. But the mystical-minded Secretary of Commerce has so many opponents on the Hill that it is sometimes considered doubtful he can lobby through the Committees and the Congress the regular appropriations he needs. This recent reorganization in Commerce has not increased the Wallace popularity because it muddles up a system the incumbent career men have toiled painfully to build despite the seven reorganizations which have visited the Department during the past 12 New Deal years. It also is unpopular because it raises some salaries and leaves others unleavened despite the general lift which has affected the Department by reason of its absorption of the Foreign Economic Administration, and, more recently Maury Maverick's $250,000,000 Smaller War Plants Corporation. The financial and banking functions of the SWPC were given by Executive Order to the Reconstruction Finance Corporation; the various business aids inherent in the SWPC were bestowed upon Commerce Department. The process suddenly erased Maury Maverick, the champion of Smaller Business, with the suddenness and completeness of a steam roller. Maury expects to settle in Los Angeles to practice law and to go back to Congress from Southern California. Maverick stands exceedingly well with the Members of Congress. These, and other equations, are supposed to add up to the potentiality that Wallace will have another extremely vigorous opponent against his drive for more money; and the Administration will not be exactly popular wherever Maverick has influence.

FOREIGN AND DOMESTIC COMMERCE

While the paper reorganization still presumably must jell, it is important to understand it. The Bureau of Foreign and Domestic Commerce is broken into 5 parts: the Office of International Trade, the Office of Field Operations, Office of Business Economics, Office of Domestic Commerce, and Office of Small Business.

The Office of International Trade is to be headed by Arthur Paul, a textile machinery manufacturer, presumably in step with the Wallace ideas, who came into the intimate purlieus of the Secretary of Commerce from the Foreign Economic Administration where he held several hush-hush jobs which took him into all countries of the world with whom we do business. Before the war he spent some time in Geneva, Switzerland, as the representative of the textile industry acting as adviser to the International Labor Office attached to the League of Nations. It is assumed here that Mr. Paul will try to mould American business relations with foreign countries in the shape of cooperation and global unity in social as well as economic ideals.

OFFICE OF INTERNATIONAL TRADE

Mr. Paul is especially interesting to the cosmetics and toiletries industry because the Pharmaceutical and Drug Unit, by whatever name it is finally known, is to come under the supervision of the Office of International Trade. There are to be ten subordinate offices in the Office of International Trade, and, at present,

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it is planned to place the Pharmaceutical and Drugs Unit in the part to be known as the Office of Foreign Trade Promotion. The other subordinate offices will be known as the Office of Foreign Trade Policy, Office of War Trade Areas, Office of Foreign Economics, Office of the Legal Council, Office of Information, Office of Foreign Trade Relations, Office of Foreign Service Liaison, Office of Director and Office of Administration and Management.

The Office of Foreign Trade Promotion is headed by DeWayne Kreager, who, like almost all the rest of the new officials, came from FEA, or from the very leftist parts of the Department of Agriculture. Naturally, the original people who have made a career of the work in the Department of Commerce, and who are submerged in this wave of newcomers, are not happy. There is also somefear that the long established public relations of the Department of Commerce may be upset because it has been the specific policy of the FEA-trained personnel to suppress information. The director of information of the Office of International Trade was the director of information of the late FEA.

PHARMACEUTICAL AND DRUGS UNIT

The eventual direction and character of the Pharmaceutical and Drugs Unit puzzles its personnel even more than it puzzles outsiders. Apparently its job is to be exclusively the business of serving in the interest of foreign trade. In the past it has served both foreign and domestic needs. Roughly, finished products have been classified as exports, while crude drugs, chemicals, oils and other materials, have been regarded as imports. The files of the Unit have been assembled on the basis of this policy. There does not seem to be any clarification about the identity of the part of the new organization which will handle the domestic phases of the Drug and Pharmaceutical Unit, and how the records and functions now combined may be disentangled, and operated separately. It is considered probable that there will be confusion and shadow-boxing until the permanent budget is established, and until the permanent functions are made clear. This aspect of the frequent reorganizations in Commerce and in other agencies has made operations tentative and personnel cautious.

JAPANESE MINT AND MENTHOL

Foreign trails seem at present to supply the paramount interest for Government officials concerned with toiletries and cosmetics and allied industries. At the suggestion of civilian officials the War Department recently sent two Colonels, identity unknown, technically competent, to study the growing of mint in Japan, and to follow the processing of the plant until it has produced the Japanese menthol which provided the chief volume of our needs before the war. It is anticipated the agriculturally scientific Colonels will take the mint from the fields, and the menthol from the distilleries, and bring the specimens to the United States, together with detailed soil analyses and information about processes and cultivation, and make the results of their surveys available to those who may use the data to improve the production of menthol in this country. It is not unlikely that some Japanese may be brought to America to help in producing the equivalent of Japanese mint and menthol.

The worth of materials such as these is reflected in the need which recently prompted the Government to bring 5½ pounds of rhubarb from India in an Army air transport at a cost of $140 for carriage. It was deemed good business to bring in the India rhubarb to make certain we could obtain the material to take the place of the Chinese rhubarb, if necessary. China is our normal source of supply of rhubarb. It is gossip in Washington that we may bring over the Pacific, Chinese rhubarb, India rhubarb, as well as shiploads of Japanese mint to plant in California and in the Carolinas, presumably the locale where these plants will have the best growth. The effort has the support of the War Department, Department of Agriculture, Commerce Department, and the War Shipping Administration, if what we hear in reliable quarters is true.

LATIN AMERICAN TRADE

From the Government Printing Office comes word that the pamphlet recently written by Lester A. Barber, of the Department of Commerce, about the market for our toiletries and cosmetics in Ecuador, is about ready to come off the press for circulation. The study particularly reveals what the demand in Ecuador, and other Latin American countries, is for talcum, toilet soaps, dentifrices, and shaving creams. It is reported our trade in these and other toiletries have more than doubled in one year. The interesting Barber report shows that the United States has steadily increased its exports of toilet preparations since 1939. There have been interferences and checks, based chiefly on the limitation of basic ingredients, the unavailability of exchange, the various shipping controls, and the purely nationalistic and understandable aims of other foreign countries which seek to encourage production within their own boundaries by their own people. The conclusion is that the growing foreign competition will greatly stimulate establishment of branch manufacturing plants by United States companies in many foreign countries, chiefly, at present, in Latin America. It is still the impression that the main foreign competition, (whenever our manufacturers of toiletries and cosmetics go) will come from the Russians who are striving to build a vast, world-wide cosmetic export business.

Government statistics show the British official policy has been aimed at expanding export of cosmetics even if domestic consumption is checked. The British strive to secure foreign exchange, and it is the policy to sell and sell for foreign funds, with the thought that the market at home can always be revived with speed.

The Department of Commerce also reported that in 1914 sales of toiletries in the United States hovered more or less constantly around $40,000,000. In 1944 they exceeded $700,000,000 per year and were steadily going up. The prediction is made that sales will total over $1,000,000,000 in a very few years.

LEMON OIL SURPLUS

That lemon oil surplus to be sold for the Army by the Department of Agriculture has stirred up some bother. It seems there are approximately 40 importers and merchandisers who come under the wire as being of historic record, meaning they were in the business before the war. Some have gone out of business, and some have so little proportionate claim on the Army oil that

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the actual number of those who might buy is less than 20. Of this number it is estimated 6 are entitled to the lion's share, and one house alone is expected to have the right to claim between 40 per cent and 50 per cent. The consideration that gives some of the Agricultural people cause for thought is the fact that under the general surplus disposal law Federal agencies, states, cities, counties, veterans, smaller business, institutions, and some others have a preferential right to claim priorities in buying *any* surplus. There has lately been much complaint by the veterans about the manner in which they were by-passed in the disposal of surplus. It is reported the lemon oil in New York is stored in leaky containers, and is graded uncertainly, and must be reconditioned and repacked in 60,000 or more containers at an expense of $5,000 to $6,000.

The rate at which the industry is expanding is evident from the experience of a plant in Florida which dehydrates oranges. It built a peacetime establishment to produce 5,500 pounds of orange powder daily. Seven pounds of powder makes the equivalent of 90 pounds of oranges. A scant ounce of orange powder makes a 6 ounce glass of juice with water added. The dehydrating plant has contracts with hotels, hospitals, railroads, airlines, and with areas where oranges are hard to get. It will not be able to run at full capacity until February or March. Yet, it already has genuine orders for enough orange powder to absorb the capacity of at least another plant of 5,500 pounds daily.

LEAD SUPPLY REMAINS TIGHT

Lead is tighter, and has been placed under more stringent control. Heavy drafts are constantly being made on the stockpile. Fortunately, despite the rapid slimming of the stockpile to 75,000 tons, the situation will not affect the production of collapsible tubes. In December, tube manufacturers were given permission to raise their use of tin from 100 per cent of the 1944 base to 125 per cent. It is reported by the U. S. Tin Mission that it found tin may be expected from Malaya in pre-war quantities early in 1948.

Reconstruction Finance Corporation reports eight large lots of chemicals used in perfumes will be offered for sale as Government surplus on and after January 1, and may be discussed with the Reconstruction Finance Corporation at the Birmingham, Ala., office. Lists of the materails are available at the Birmingham office. The chemicals were released by the Alabama Ordnance Works, Sylacauga, Ala.

The Victor Importing Company of New York City set up a defense against a complaint issued by the Federal Trade Commission which has aroused much interest among importers. The defense is that the FTC is without jurisdiction or authority to regulate or challenge the marking on imported products; that when an imported article is used in making a new and different article in the United States, public policy does not require that the name of the country where the foreign parts originated be stated on the finished product; and as amended by the Wheeler Lee Act, the law does not confer upon FTC, with respect to products other than food, drugs, devices and cosmetics, any power to require affirmative disclosure as to the country or origin of the component parts used in the manufacture of such products.

Fats and oils, approximately 1,660,000,000 pounds, constitute the lowest stock since 1936. No hopeful promises are made for 1946. Domestic production for 1945-46 is estimated at 9,600,000,000 pounds, or 1,600,000,000 pounds less than total 1946 requirements. The hope is expressed that soap fats may be in slightly larger supply than in 1945, chiefly by reason of imports of copra. OPA made a special announcement that basic materials such as fats and oils will be held as closely as possible to present ceilings to hold down increases in the prices of consumer goods. . . . Chemicals and non-food agricultural products of all kinds are among the commodities enumerated by the Export-Import Bank as within the range of things that may be purchased under the terms of the $550,000,000 loan to France. . . . After December 31, 1945, exporters sending goods to Brazil must present shipping documents to Brazilian authorities for legalization before the merchandise arrives at the Brazilian port. Failure to comply will subject the importer to a fine equal to the amount of import duties. The fine will be levied when the shipping documents are missing or when the shipment must be certified after the ship arrives in Brazil. . . . M. Francois Goby, head of Tombarel Freres, Grasse, France, is booked to visit various Federal Government offices in the Capital during January. He represents one of the largest essential oil exporting syndicates of France. . . .

REPARATIONS EQUIPMENT

Distillation equipment, capable of fractionating essential oils and other basic materials in cosmetics and toiletries, are expected to be part of the reparations machinery, available to American business firms, from Germany.

Shortly before the holidays, the State Department announced various machinery would be available to citizens of the United States, Britain and France, from the areas of Germany occupied by troops of the three nations.

Further information provided by the Office of Foreign Trade Promotion of the Department of Commerce revealed that the machinery would be listed by the Allied Control Commission, and that one list had been supplied to the Department of Commerce shortly before New Year. The first list has not yet been analyzed, and it is not clear exactly what kind of machinery is enumerated which may be of interest to the toiletries and cosmetic industry. Other lists will be supplied very shortly.

The lists will be made available for inspection by businessmen at the field offices of the Department of Commerce, which means the regional office or district office wherever it is now located. Business people are urged to examine the lists to determine whether or not there are any special types and kinds of machinery they may wish to obtain. Details about the methods of acquiring the machinery and equipment may be discussed with the representatives of the Department of Commerce. It is emphasized that the Government will welcome registration of interest by business men. If there is no regional or district office of the Department of Commerce in the vicinity, it is suggested those interested write The Drugs and Pharmaceutical Unit, Bureau of Foreign and Domestic Commerce, Department of Commerce, Washington 25, D. C.

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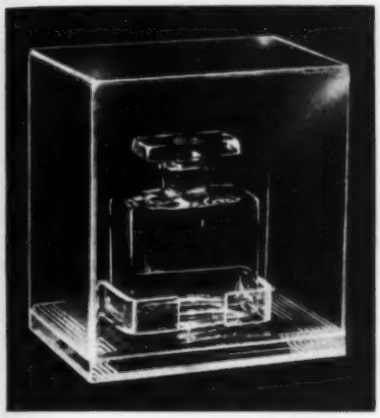
NEW PRODUCTS AND PROCESSES

New Plastic Perfume Containers

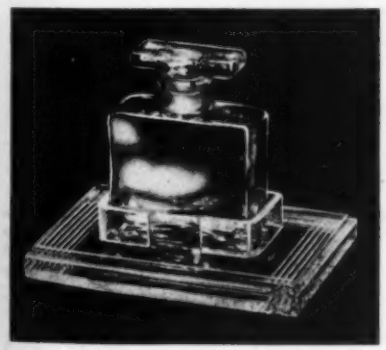
F. J. Nussbaum & Co. has placed new, brilliantly transparent, shatterproof Lucite containers on the market for the use of perfume bottles.

The containers are fabricated from sheets of Lucite, hand machined, and cut in such a way that brilliancy is added to the package, particularly at the edges.

The new containers are unbreakable, do not distort, are unaffected by moisture, alcohol or temperature. They may be engraved, painted, or decorated by the silk screen process. They are available in crystal-clear flint, in pastel colors, in transparent colors, or frosted effects may be achieved. A feature of the containers is a spring-like clip on the base which holds the bottle firmly preventing it from slipping or tipping over. For lower priced items the base may be used alone as a combination counter display and vanity table accessory. The base is available in any color and a trade mark may be engraved on it.



Complete container with bottle inside

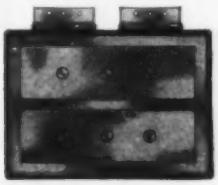


Bases available separately for any use

The company is equipped to cooperate with perfumers and cosmetic manufacturers in the design and fabrication of containers, and also of pedestals, trays and other specialties, for counter displays. Samples and full information may be obtained by writing to the company at 473 Hudson Ave., Brooklyn, N. Y.

New Non-Electric Magnet

The successful development of a powerful, compact, non-electric magnet separator with a working surface made entirely of stainless steel is announced by Eriez Mfg. Co. The announcement states that the Eriez magnet offers a simple and efficient means of removing large and microscopic iron and steel particles from raw materials.



Non-Electric Magnet

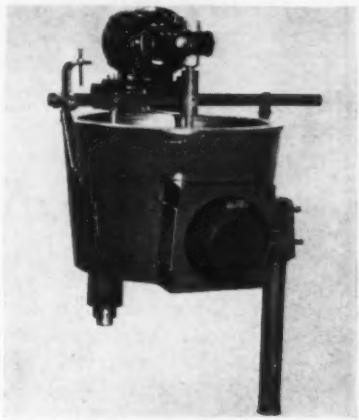
The magnets may be placed ahead of dies, at points where raw materials enter chutes or conveyors, or in front of pulverizers to prevent pieces of metal passing into delicate and expensive machinery.

The magnets require no wiring, power being furnished by the Alnico steel magnet castings. The makers state that under normal conditions strength will last indefinitely.

Improved Cosmetic Heater

The Sta-Warm Electric Co., has placed on the market an improved cosmetic heater, electrically heated, with inner pot and valves and agitator parts of stainless steel, designed especially for the heating and dispensing of lipstick compound. It is available in capacities of 2, 5 and 10 gallons.

Special features claimed are: Sta-Warm heating unit with thermostatic control insuring uniform heating from sides and bottom of the inner pot, with dependable temperature control within a range of 100 to 300 deg. F.; positive, fast-action, nondrip, needle type dispensing valve which can be operated either by hand or foot control; use of stainless steel or monel parts wherever contact is made with lipstick compound, prevents the dyes from being contaminated and changing color; propeller-type, motor driven agitation at 43 r.p.m. is fast enough to keep solid material in suspension during the pouring operation, but slow enough to prevent formation of undesirable air bubbles in the wax.



Sta-Warm Heater

New Fluorescent Light

The Duro Test Corp. has announced a new fluorescent light, "Safreen," for industrial and commercial use.

It is stated that the new lamp makes possible a brighter, yet more mellow light, double lamp life and instant illumination.

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AMONG OUR FRIENDS

▸ Dr. Darrell Althausen is a recent addition to the staff of Fritzsche Brothers, Inc., New York, N. Y. He will be in charge of the company's new products division with offices and laboratories in the Clifton, N. J. plant.

Darrell Althausen

Until recently, Dr. Althausen saw active service as a Major with the Chemical Warfare Service, and in the Subsistence Research and Development Division of the U. S. Army Quartermaster Corps.

The author of numerous technical papers, and with a record of many years of constructive effort devoted to the alcoholic beverage industry prior to his Army service, Dr. Althausen brings to his new work a background of experience and achievement which should be of value to Fritzsche clients.

▸ Frederick E. Shoninger, president of Antoine Chiris Co., Inc., New York, N. Y., who has just returned from a lengthy business trip to England and France, announces that Albert V. Henissart, an executive of the corporation, is proceeding on a visit of inspection to Mexico, the West Indies and Central America, as well as to Venezuela and Colombia. Mr. Henissart, who has, among other things, been in charge of Chiris activities in Latin America for a number of years, will visit the Chiris clients in these territories and inspect the Chiris agencies.

▸ Elmer H. Bobst has assumed the presidency and general direction of William R. Warner & Co., Inc., New York, N. Y.

Mr. Bobst, former president of Hoffmann-La Roche, Inc., has taken over the duties of chief executive of the company from G. A. Pfeiffer, who is withdrawing from active management of the business at the age of 73. He will continue as a consultant.

Major units in the firm include Richard Hudnut, the Du Barry Success School and Standard Laboratories. The firm's export business, amounting to approximately 30 per cent of its total volume, reaches into 82 foreign countries and these are served through 17 foreign Warner companies which own their own establishments and plant facilities.

Mr. Bobst was born in Clearsprings, Md. His first contact with the pharmaceutical business came at the age of 17, and he has been active in the field since that time; with the exception of a short time spent in the study of law.

In 1921, Mr. Bobst, who had been Hoffmann-LaRoche's outstanding salesman, became head of that company. He has seen, during the time he has been in charge, the company's employees grow in number from 34 to 1,800.

The history of the Pfeiffers in the pharmaceutical business began in

Elmer H. Bobst

G. A. Pfeiffer

1891 when Henry Pfeiffer organized the Allen-Pfeiffer Chemical Co. In 1900, he sold his interest in the firm, and with his brothers, Paul M. and G. A. Pfeiffer, organized the Pfeiffer Chemical Co. The William R. Warner company was purchased in 1908, and in all, the Pfeiffers purchased about $20,000,000 worth of going concerns in expanding their business to its present size.

▸ Willard A. Raisley, recently returned from service as a Lieutenant, U. S. Navy, has rejoined van Ameringen-Haebler, Inc., New York, N. Y., as a member of the sales staff. He was active in the company from 1937 until volunteering for the Naval service in 1942, and is one of the first of the company's fifty-five service men to return.

Before the war, Mr. Raisley was sales representative in the Philadelphia area, and will now be attached to the van Ameringen-Haebler Chicago office for sales activities in the Middle West.

▸ Fred Leonhardt has become affiliated with Fritzsche Brothers, Inc., New York, N. Y., following his release from the Army after three and one-half years of service.

Fred H. Leonhardt

As many young men in the early months of the war, Mr. Leonhardt was faced with the choice of continuing his studies or entering his Country's service. He chose the latter, and in July, 1942, joined the Cavalry, later to be transferred to the 823rd Tank Destroyer Battalion.

In 1943 he went to North Africa, later seeing service in the Italian campaign with the 6723 Provisional Truck Battalion supplying the Anzio Beachhead, and finally with the 805 Tank Destroyer Battalion in the Rome, North Apennines and Po Valley campaigns.

After twenty-five months overseas, Mr. Leonhardt is happy to settle down to the less turbulent atmosphere of the Fritzsche plant. There he hopes to become better acquainted with the oils and fragrances native to Italy and France which he failed to encounter in these countries during the war.

▸ Lewis G. Bernstein who was recently discharged from the Coast Guard after 32 months of service with the armed forces is back at his desk with Coty, Inc., New York, N. Y., as resident counsel. Mr. Bernstein is well-known in the trade for his work in cleaning up the counterfeiting of perfume for leading houses and for his work for the Association for the Protection of Trade Mark Rights. He has also returned to the practice of law specializing in matters pertaining to the toilet goods and allied industries in association with S. Stephen Baker at 185 Madison Ave., New York, N. Y.

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Citral C. P.	Methyl Ionone

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▸ John F. Neill has been appointed manager of the New York branch of Merck & Co., Rahway, N. J.

Mr. Neill, who was born in St. Joseph, Mo., joined Merck & Co. after graduating from the University of Pennsylvania Wharton School of Finance and Commerce. He has occupied various merchandising and sales positions since that time.

John F. Neill

He was called to active service in the U. S. Naval Reserve, and served until May, 1944, at which time he was made assistant manager of the New York branch.

▸ Norwood Thornton, plant physiologist, formerly with Boyce Thompson for Plant Research, has joined the Fine Chemicals Division of Carbide and Carbon Chemicals Corp., New York, N. Y.

He will assist in the study of the use of synthetic organic chemicals in various biological fields, and similar applications.

Dr. Thornton is a graduate of the University of Maryland and of Cornell University. He has been engaged in research activities concerned with the effect of carbon dioxide and other chemicals on the storage of plant tissues.

▸ Reginia Tierney has been appointed director of advertising of Affiliated Products, the cosmetics division of American Home Products Corp., New York, N. Y.

Regina Tierney

Miss Tierney joined Affiliated Products a year and a half ago, working in new products development, and in merchandising and styling.

Previously, she was associated with Lehn & Fink, Inc., for three years, and before that with Wm. Esty & Co.

Miss Tierney will be responsible for the ambitious program of restyling and revamping practically all products in the Affiliated Products line.

▸ Donald S. Frost has joined Bristol-Myers Co., New York, N. Y., as assistant advertising manager. He had been in the U. S. Navy for three and one-half years. Previous to his military service, Mr. Frost has been associated with the International Business Machines Corp. and Owens-Illinois Glass Co.

▸ Harry T. Johnson has been appointed director of sales for Parfums Corday and Kathleen Mary Quinlan, Inc., New York, N. Y.

Harry T. Johnson

Mr. Johnson recently resigned as vice-president and general manager of Delettrez, Inc. Prior to this connection, Mr. Johnson was general manager of the Elizabeth Arden Co., and before that he was general manager and a member of the board of Directors of Helena Rubinstein.

Edward Morrish

Edward Pusey Morrish has joined the same two firms as director of production, control and research. He was recently employed by the American Home Products Corp. as director of cosmetic departments. Early in the war, he acted as chief of the Cosmetic Division, Office of Price Administration, controlling nine regional offices dealing with cosmetic price control.

▸ Frank H. Sloan, formerly with Naugatuck Aromatics, Inc., who was recently discharged from the Army air force joined the Rene Forster Co., New York, N. Y., January 1 in a sales capacity.

▸ Edward M. Butler has joined Delettrez, Inc., New York, N. Y., as vice-president and general manager. He was formerly associated with Yardley of London.

▸ Charles Luckman has been made executive vice-president of the Lever Brothers Co., Cambridge, Mass., taking effect Jan. 1. He was formerly president of the Pepsodent Division.

Charles Luckman

Henry F. Woulfe, who has been with the Pepsodent since 1927, has been elected vice-president and general manager, succeeding Mr. Luckman as operating head of the Pepsodent Division.

Mr. Luckman became associated with Pepsodent in 1935 as sales manager. He became vice-president in charge of sales and advertising in 1937, and vice-president and general manager in 1938. He became president in 1943.

The purchase of the Pepsodent firm in 1944, at a reported price of $10,000,000 cash, marked the first entry of Lever Brothers in this field since its formation in 1899.

Kenneth Gladstone Smith, previous president of Pepsodent, died Dec. 4.

▸ Joseph Parentini, formerly connected with Sutton Cosmetics, Inc., in the capacity of general manager is now a member and officer of Spooner, Inc., New York, N. Y. Mr. Parentini is well known in the industry for his creation of new packages and development of new products.

▸ Joseph A. Danilek has been appointed sales manager of Affiliated Products, division of American Home Products Corp., New York, N. Y.

Joseph A. Danilek

Mr. Danilek was formerly manager of Tussy Cosmetiques, and previous to that comptroller and general manager of Elizabeth Arden, and comptroller of Helena Rubinstein.

Recently, Mr. Danilek was a member of the Advisory Board Committee to the War Production Board for the cosmetic industry and for a number of years was director and secretary of the Toilet Goods Assn.

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An exquisite and delicate fragrance which embodies the alluring beauty and exotic charm of the Orient.

Cosmetic and soap manufacturers will find this unique creation the answer to their long-sought problem for "something different".

Samples gladly sent on request.

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▸ J. Casper Schwarz has resigned his position as assistant superintendent of Lambert Pharmacal Co. to offer his services as a consultant to the cosmetic, perfume and allied trades. He has been actively engaged in these fields for the past eleven years.

Prior to his affiliation with Lambert, he was chief chemist of the Godefroy Mfg. Co. and before that, general manager of production and personnel of Carlova, Inc., and The Lander Co. Mr. Schwarz maintains offices at No. 4, Wakefield, Laude, St. Louis County, Mo.

▸ Clifford M. Baker, president of Pond's Extract Co., New York, N. Y., has been made a director of L. D. Seymour & Co., exporters and importers, New York, N. Y.

Other members of the Board of Directors include Frederick T. Kelsey, of Waldrop and Spaulding; S. Bayard Colgate, chairman of Colgate-Palmolive-Peet Co.; Paul E. Monath, vice-president, and L. D. Seymour, president of the company.

▸ Homer P. Metzger has been appointed sales manager of the chain store division of Richard Hudnut Sales Co., New York, N. Y.

He was formerly with the Zonite Corp. as syndicate, sales and promotion manager. During the war, he was Salvage Chief of the War Production Board, and was recently an account executive with H. W. Kastor & Sons Advertising Co.

▸ Oscar C. Olin has been appointed director of sales, advertising and promotion of Lynette Perfumes, Inc., New York, N. Y. He was formerly associated with Revlon Products Corp., as sales manager of the retail division. Mr. Olin has been active in the cosmetic industry for the past twenty-two years.

▸ Edwin J. Putzell, Jr., until recently assistant to Maj. Gen. William J. Donovan, Director of the Office of Strategic Services, has entered the service of Monsanto Chemical Co., St. Louis, Mo., as assistant to the treasurer.

▸ James S. Macintosh was honored recently when a special emblem and certificate were presented to him for distinguished meritorious service in his work directing Army Soap Procurement at Jersey City Quartermaster Depot, Jersey City, N. J. The award was made by Col. George F. Spann.

Mr. Macintosh was called to the depot in July, 1943. He was formerly general manager of Holbrook Manufacturing Co., Jersey City, N. J.

▸ Clifford Pettit has joined Richard Hudnut, New York, N. Y., as purchasing agent.

Previously, Mr. Pettit was purchasing agent and in charge of the development of products for Sales Affiliates, Inc., for four years. Before that, he was purchasing agent for Durkee Famous Foods for seven years.

▸ William S. Thawley has joined S. B. Penick & Co., New York, N. Y., as sales representative in Maryland, Pennsylvania, Delaware and the District of Columbia. Mr. Thawley had been in the U. S. Navy for more than two years. He is a graduate of the Philadelphia College of Pharmacy and Science.

▸ Ralph E. Dorland was elected president of the New York Board of Trade at the annual meeting of the board of directors, held Dec. 20. Mr. Dorland is manager of the New York division of the Dow Chemical Co., Midland, Mich.

▸ William J. Heckman has been appointed purchasing agent for William R. Warner & Co., New York, N. Y.

▸ Walter A. Patrick has joined the export department of S. B. Penick & Co., New York, N. Y., as manager of promotional work. He was formerly associated with Parke, Davis & Co.

▸ Dr. Samuel T. Helms has been appointed medical director of the Lambert Pharmacal Co., St. Louis, Mo. He was formerly a Lt. Col. in the Army Medical Corps.

▸ H. Robert Marschalk has been promoted to sales manager of the Alfred D. McKelvy Co., New York, N. Y. Mr. Marschalk recently joined the McKelvy Co. as assistant to the president on sales after four years as a Lieutenant in the Navy. Before the war, Mr. Marschalk was assistant sales manager of the Vick Chemical Co.

▸ Edward A. Jens has been made vice-president of Roycemore Toiletries, Inc., Chicago, Ill. He was formerly manager of the San Francisco office of an insurance brokerage firm.

At the same time, W. T. Schroeder became sales manager. Mr. Schroeder had been associated with Colgate-Palmolive-Peet Co. for twelve years, during which time he served as general manager of the Brazilian and Philippine Island divisions. He was also with G. H. Packwood Mfg. Co. as sales manager.

▸ Col. Omer W. Herrmann has been appointed assistant director of the Fats and Oils Branch, Production and Marketing Administration, U. S. Department of Agriculture.

▸ Howard R. Axelrad has become the treasurer of Pinaud, Inc., New York, N. Y.

▸ Hugh D. McKay has become president of the Alfred D. McKelvy Co., New York, N. Y. Alfred D. McKelvy will continue as a consultant on merchandising, advertising and sales although he has resigned as chairman of the board.

▸ Eugene J. Rick has resigned as vice-president of John Hudson Moore, Inc., New York, N. Y. His association with the firm lasted over thirteen years. He is temporarily located at 545 Fifth Ave.

▸ Phillip M. Prussak has been appointed chief chemist for Associated Brands, Inc., Brooklyn, N. Y. He had been affiliated with Halliwell, Inc., and before that with Cyclax of London.

▸ Arthur G. Halfpenny has been promoted to assistant to the general manager of the Northam Warren Corp., Stamford, Conn.

Mr. Halfpenny has been in the drug and cosmetic business seventeen years, five of them with the Northam Warren Corp. His activities will cover purchasing, advertising and all other matters pertaining to the general management except factory operation, which is under the direction of John H. Drayton, assistant to the general manager on the operation of factories.

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NEWS and EVENTS

Toilet Goods Sales Reach $700,000,000

L. A. Barber, writing in the December issue of *Domestic Commerce*, states that beginning with an estimated $40,000,000 level in 1914 the toilet goods industry has expanded to achieve a retail sale volume of over $700,000,000 in 1944.

This result is all the more remarkable considering the fact that the industry was classified as an important, but a non-essential one. "Containers, alcohol, glycerin and many other things were allocated on a diminished-percentage basis, but the industry went forward."

Firmenich & Cie. Celebrates 50th Anniversary

Firmenich & Cie., Swiss producers of the Chuit, Naef line of perfume specialties and aromatic chemicals, celebrated the 50th anniversary of the founding of the company at its headquarters in Geneva, Switzerland, and at the eighty offices and representatives of the company throughout the world. The firm is represented by Firmenich & Co., 135 Fifth Ave., New York, N. Y. A branch office of the firm is maintained in Chicago, Ill.

Originally known as Chuit, Naef & Cie., the company was organized by Dr. Philip Chuit and Martin Naef in 1895 at the time when the world's knowledge of the manufacture of perfume materials was scant. The extensive development of the aromatic chemical industry during the past half century is to a considerable measure due to the contributions of Chuit, Naef, the Firmenich family and their associates.

Dr. Chuit's initial undertaking was the manufacture of vanillin and the development of odor-pure ionones. Following this, he worked on geraniols and specialties such as heliotropol, florentiol and violet bodies. He created dianthine in 1902, and the following year discovered an original procedure that enabled him to make iralia. Civettine and grisambrene appeared just before the turn of the century, and the Naef synthetic of the oils of neroli and jasmin were created shortly thereafter.

The constitution of cyclosia base was one of Dr. Chuit's greatest contributions to aromatic chemical science. This isolation of the new note in the muguet cycle attained its first success in 1908.

Dr. Chuit died in 1939. His laboratory had been turned over to his nephew, Dr. Roger Firmenich, who

Roger Firmenich

Fred Firmenich

now heads the technical and research facilities of the company.

Fred Firmenich, who had married Chuit's sister, joined the firm in 1900, and directed the commercial development of the company until his retirement in 1943. It was under his guidance that the specialties were introduced to the markets in Europe and the New World.

The affairs of the company are now directed by his brother, Hugo Firmenich, and Fred's sons, Andre and Roger, as well as Hugo's sons, Robert Albert and Dr. Georges Firmenich. The latter is assistant in technical matters to his cousin, Dr. Roger Firmenich. Andre Firmenich is well known to the perfume and cosmetic trade in this country, having visited here annually for several years prior to the war.

Many outstanding developments in recent years have been conceived by Dr. Leopold Ruzicka, who is associated with the firm. Dr. Ruzicka was honored in 1939 with the Nobel prize award in chemistry, making the

Andre Firmenich

Leopold Ruzicka

first time that this distinction was bestowed upon a chemist in the perfumery field. Dr. Ruzicka joined the company after the close of World War I.

Firmenich & Cie. has maintained a constant research program throughout the war period, and one of the results of this work will appear in 1946, when the company plans to offer alphacivettone, a new synthetic body that is claimed to be identical in performance with natural civettone.

R. C. Watson

A. T. Frascati

Firmenich affairs in the United States are directed by Rupert C. Watson, a partner in the company, who has been associated with the Chuit, Naef line practically since its introduction in the United States many years ago. The company's compounding laboratories in New York are under the direction of Dr. A. T. Frascati.

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Perfumes Fall Into Seven Groups, van Ameringen Tells Fashion Group

There are seven distinct groups of perfume odors, according to the analysis of A. L. van Ameringen of van Ameringen-Haebler, Inc., New York, N. Y., who addressed the Fashion Group at its symposium on perfumery at the Murray Hill Hotel, New York, December 18.

The groups are: (1) flower perfumes and floral bouquets; (2) aldehyde perfumes; (3) oak moss types; (4) amber oriental; (5) woody types; (6) leather masculine types; and (7) new mown hay types.

Herman Brooks, president of the Toilet Goods Association, presided at the symposium and Albert Lieberfield and J. S. Wiedhopf were among the prominent men in the trade who contributed to the discussion.

In marketing a perfume it was found that the following factors in the order given influence the purchase of a perfume by the ultimate consumer: fragrance, the name of the maker, the advertising appeal, the name of the perfume and the promotion.

Montgomery St. Alphonse pictured recently as he completed a period of twenty-five years as head of W. J. Bush & Co. (Canada) Ltd.

The largest sales of any single group of perfumes go to the flower perfumes and floral bouquets, especially for day-time use. There is a trend toward the woody type.

The French were the first to recognize the importance of using synthetic bodies—not synonymous with inferior—in creating their perfumes. Since 1900 there has been a steady influx of interesting perfumes created by the discovery of aromatic materials not found in nature. Perfumes with names easy to pronounce and spell seem to have better sales appeal. The so-called sexy perfumes appear to be growing in popularity and are evidently here to stay. The perfume industry is definitely not over extended and the present upward trend is likely to continue. Good American perfumes will not suffer in any way when French perfumes return to the market.

Fritzsche Holds Sales Conference and Dinner Dance

Fritzsche Brothers, Inc., New York, N. Y., held its first year-end sales conference and annual dinner-dance, last month, since the temporary abandonment of the function early in the war.

Two hundred sixty-seven employees of Fritzsche Brothers, Inc., who attended a dinner-dance held Dec. 15.

The sales conference, held Dec. 11, brought together all department heads and the representatives from branch offices throughout the United States and Canada. Most active in the conduct of the conference were: Messrs. F. H. Leonhardt, John H. Montgomery, H. P. Wesemann and Joseph A. Huisking.

Two outstanding features of the meeting were the showing of colored motion pictures taken by Charles C. Bryan while on special duty with the U. S. Air Forces in Tibet, and a discussion of cordial flavors by Dr. Darrell Althausen, who recently became a member of the Fritzsche research staff. Mr. Bryan's presentation left no doubt in anyone's mind as to *why* the high cost of musk.

The company's annual dinner-dance, held Dec. 15, was the highlight of the week. It was featured by the return of many of the firm's war veterans who were warmly welcomed by Mr. Leonhardt. Their presence among the 267 employees attending helped to make this one of the happiest and most gala events in recent Fritzsche history.

The combined staff of W. J. Bush & Co. (Canada) Ltd., Montreal, Toronto and Winnipeg, met at a banquet on Oct. 20th to honor Montgomery St. Alphonse upon the occasion of his twenty-fifth anniversary as head of the Canadian company.

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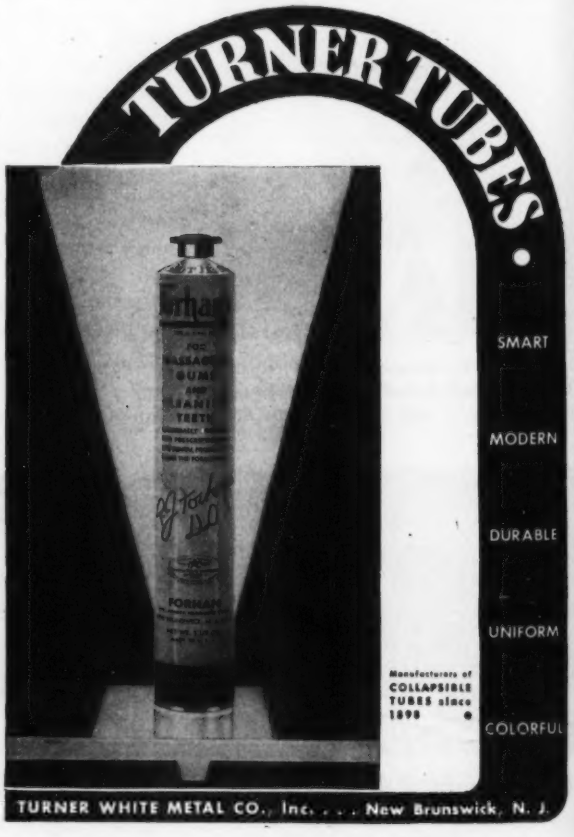

Foragers Honor War Veterans at 49th Annual Banquet January 5

War heroes from the association were honored by the Foragers at the 49th annual banquet held at the Yale Club, New York, N. Y., on the evening of January 5. About 200 were present to enjoy the cocktail party and banquet.

Following the feast, Sheriff Walter Conklin, who is entering his fourth year as president of the association, asked for a silent tribute to members who have died during the year. A letter was received from William C. Randall, one of the original members.

Edward Russell, chairman of the entertainment committee, then took over, introducing Lieut. Col. Matt Urban of *Liberty Magazine* and Sgt. Alexander Kahn of Halloran hospital, both of whom spoke to a most appreciative audience.

Silver cigarette lighters were then presented to members of the armed services who were present: George B. Dermody, Raymond J. Duffy, Harold V. McCann, Nelson N. Millard and St. John Terrell. Other members in the armed services, who were unable to be present either because they are still on active service or are ill, were Henry N. Calisher, Allen B. Laing, Jr., and Leonard H. Schultes. William Spence, one of the members, was present with two sons who have just been discharged from the armed services. Robert Fiske and Thomas Gladding were also honored for their service.

The meeting was held exactly to the day on the 49th anniversary of the founding of the organization, which has functioned continuously for the welfare of the cosmetic industry longer than any other association in the business.

Officers are: Walter A. Conklin, president; Richard A. Powell, vice-president; and Arthur J. Connolly, secretary and treasurer. The Board of Governors is made of up W. W. Neilson, John H. Curry, L. S. Huntington, R. F. MacGilvray, V. H. Fredholm, O. H. Betz, Walter C. Rochelle, C. R. Keeley, Frank J. Hogan, Stanley Park, J. J. Franz and George B. Dermody.

The complete success of the banquet was due to the work of the entertainment committee consisting of Edward D. Russell, chairman; Stanley Park, J. J. Fenlon and R. F. MacGilvray.

Emerson Drug Enters Cosmetics Field

Emerson Drug Co., Baltimore, Md., entered the cosmetics field on Jan. 3, with its purchase of Jeurelle, Inc., New York, N. Y., distributors of Jeurelle perfumes and bath preparations, and "Seventeen" cosmetics.

Barbara Hurst, former president of Jeurelle, Inc., remains as general manager under the new set-up. Officers are: President, K. A. Bonham, who is also president of The Emerson Drug Co.; H. L. Grafer, executive vice-president; J. H. Kelly, vice-president; Hamilton Shea, treasurer; and M. E. Brennan, secretary.

The development of new products is planned by the company, and restyling of some of the present items is indicated. Batton, Barton, Durstine & Osborn, Inc., will be the agency in charge of an enlarged advertising and promotion campaign for 1946. Stell Ayleshire will collaborate on merchandising and promotion.

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Cyclonol is chemically 1-methyl-3-dimethyl-cyclohexanol-(5). Graphically the structural formula is given in Fig. 1. It may be considered a lower homologue of symmetric or meta Menthol which has the structural formula shown in Fig. 2.

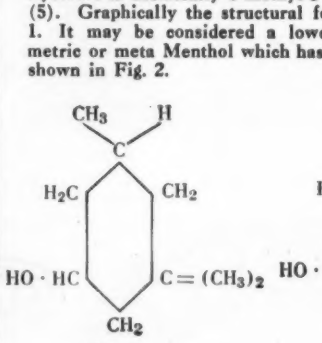

FIG. 1

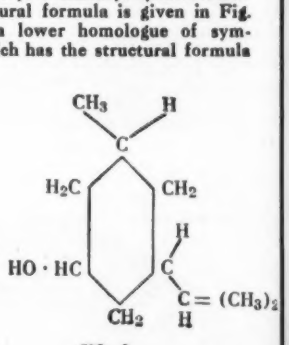

FIG. 2

Cyclonol replaces Menthol satisfactorily in shaving creams and lotions, liniments, analgesic balms, ointments and similar preparations. It has also been accepted by the U. S. Treasury Department as a Denaturant for alcohol in place of Menthol U.S.P.

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Mark Cross Organizes Men's Toiletries Division

Mark Cross, New York, N. Y., which has been in the leather goods business in this country for over one hundred years, is going into the men's toiletries field with a full line of products. While there may still be some changes, it is anticipated that the line, which is to be called "Cross Country," will consist of cologne, after-shave cream, bath soap, talcum, a liquid deodorant and shave bowl.

Pete Leube

Distribution will be effected through franchise agencies only, to consist of better department stores and men's shops. The present address of the new organization is in the Mark Cross building at 655 Fifth Ave., New York, N. Y. New quarters will be used at a later date.

The new company is under the direction of Pete Leube, who has accepted the vice-presidency and general managership of the firm. Mr. Leube has just resigned as general sales manager of Parfums Corday and Kathleen Mary Quinlan. Prior to that, he was vice-president of Parfums Schiaparelli and previous to that, general sales manager of Bourjois and Barbara Gould for many years.

The advent of Mark Cross into men's toiletries promises some interesting developments in this greatly expanding field.

Over 200 Attend van Ameringen-Haebler Tenth Annual Party

About 200 men prominent in all branches of the industry were guests of van Ameringen-Haebler, New York, N. Y., on the evening of December 18 when the tenth annual cocktail party was held. The occasion proved to be a most enjoyable one with old friends renewing acquaintances and discussing informally the developments in the industry. One note ran through the discussions —1946 will be a banner year.

New York Board of Trade Elects Officers

At a special meeting of the Board of Directors, held Dec. 20, the New York Board of Trade elected Ralph E. Dorland president.

Richard V. Goodwin and Herman L. Brooks were re-elected vice-presidents, and Warren L. Baker was also elected a vice-president. Harry J. Carpenter was re-elected treasurer and M. Leo Gitelson was elected assistant treasurer.

Richard Kulze, who recently returned from service in the Army, was elected secretary, which position he held at the time he was called to service.

Edwin M. Otterbourg was elected general counsel and M. D. Griffith was elected executive vice-president. Jesse L. Hopkins, the oldest member of the New York Board of Trade, became executive vice-president.

Essential Oil Meeting

The Essential Oil Assn. held its annual meeting Jan. 11, in the Hotel Pennsylvania, New York, N. Y.

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Current Brazilian Essential Oils Position Report

A. T. Fiore, research chemist of Givaudan - Delawanna, Inc., New York, N. Y., has just returned from a one-month trip to Brazil where he studied the essential oil production in that country. He traveled through the state of São Paulo and went deep into the interior.

"The outstanding feature of my trip," said Mr. Fiore upon his return to this country "was my impression that the current Brazilian essential oil production (except for mint) has been exaggerated."

"Brazilian producers of essential oils have shown interest in flower oil production, but so far their efforts have not been successful," Mr. Fiore said. "The industry, however, is still in its infancy. At this stage, producers lack the French know-how, in both the agricultural and production aspects, but the potential for these products in Brazil is enormous."

Mr. Fiore returned to the United States with adequate samples of several new oils which have not hitherto been carefully studied and which he and his colleagues will investigate. He also had samples of several Brazilian oils which have previously been produced only in Europe and Asia, such as patchouli, vetivert and geranium.

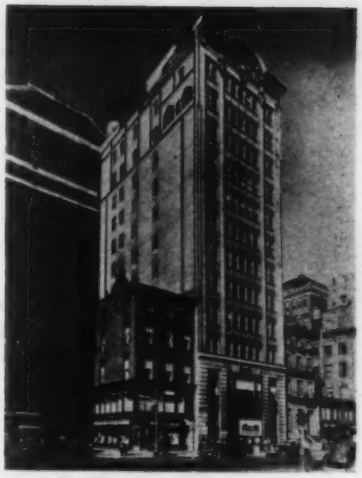
DCAT Section Elects Officers

The Drug, Chemical and Allied Trades Section of the New York Board of Trade, Inc., elected officers to serve during the next fiscal year on Dec. 13.

Harold M. Altshul

The results of this election were: Chairman, Harold M. Altshul; Vice-chairman, Carle M. Bigelow; Treasurer, Robert B. Magnus (re-elected); Acting secretary, Helen L. Booth (re-elected); Carl M. Anderson was re-appointed counsel.

The retiring chairman, Guy L. Marsters, was presented with a white Catalin gavel in recognition of his services during the year.



Mem's new headquarters

Mem Purchases Twelve Story Building

The twelve-story loft building located at 67-69 Irving Place, New York, N. Y., was recently purchased by Paul M. E. Mayer, president of Mem Co., from the estate of Charles Hirshon.

Mem Co. will occupy most of the building for the manufacture of its toiletries, for offices and showrooms.

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American Soap & Glycerine Producers Elect Officers

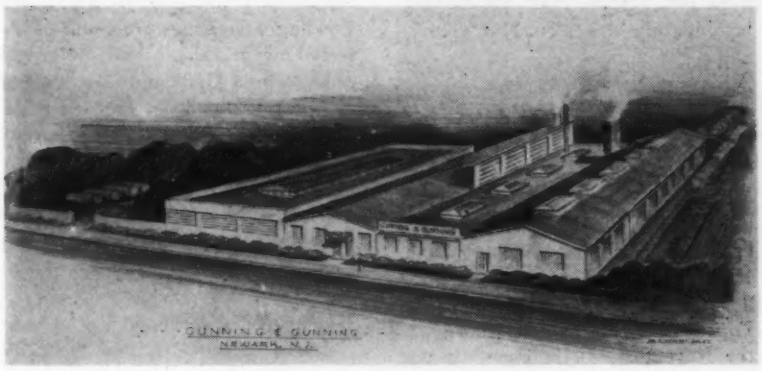
Our closing date has not given us an opportunity to report extensively on the annual meeting of the Association of American Soap & Glycerine Producers, which took place Jan. 10 and 11, in the Hotel Roosevelt, New York, N. Y.

Officers elected for the coming year are listed below: President, R. R. Dupree; Vice-president for Western U. S., H. F. Bernhard; Vice-president for the Central U. S., E. A. Moss; Vice-president for Eastern U. S., E. H. Little. N. S. Dahl was reelected treasurer for the thirteenth consecutive year.

The Board of Directors consists of: T. E. Allen, H. D. Banta, C. E. Bertolet, F. A. Countway, H. Dock, D. M. Flick, C. G. Fox, E. B. Hurlburt, H. Kranich, and G. A. Wrisley.

The nominating committee consisted of: D. M. Flick, chairman; R. W. Peet, A. B. Stewart, and G. A. Wrisley.

Roscoe C. Edlund was again elected secretary and manager of the association.



New Gunning & Gunning plant in Newark, N. J.

Gunning & Gunning Acquire New Manufacturing Plant in Newark, N. J.

Due to the increasing demand for its aromatic chemicals and perfume compounds in the past few years, Gunning & Gunning, New York, N. Y., has outgrown its production facilities and as a result the company purchased a plant in Newark, N. J. New equipment has been installed and the manufacturing capacity has been notably increased. The company has been moving its manufacturing facilities to the new plant which is now in operation. The executive offices are continued at 601 W. 26th St., New York, N. Y. Under the direction of Nelson A. Gunning the company has been making excellent progress.

A new 30-page catalog listing and describing all of the products of the concern is now in preparation and will be available for distribution in the near future.

Genuine **ORRIS** *again* **AVAILABLE!**

OIL ORRIS ROOT LIQUID ABSOLUTE
ORRIS CONCRETE
ORRIS OLEORESIN *(Resinoid)*

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LONDON **MITCHAM** **WIDNES**

Toiletries Trends, New Merchandising Monthly Makes Its Bow

A new monthly journal of toiletries merchandising for department stores, specialty shops, selected drug stores, chain stores, wholesalers and representatives in the 22 states west of the Mississippi as well as 250 key retailer toiletries merchandisers east of it has been launched by A. A. Butterworth, 1606 N. Highland Ave., Hollywood 28, Calif. The premier issue of *Toiletries Trends* as it is known was the November, 1945, issue. It was 9¼ x 12¼ in. in size and contained 78 pages of text and the advertising of 44 toiletries manufacturers. The format and layout are well planned and the contents present relevant and useful information.

In the first number there were 11 features and a wealth of news about products, promotions and the personalities who function in an important way in merchandising toiletries; gathered by an alert editorial staff distributed chiefly among the principal cities west of the Mississippi. "The Los Angeles Market," the leading article, is the first of a series of studies of markets of the west. Don Cowling contributes a column of entertaining miscellany; Edythe Bright analyzes in a Merchandising Seminar significant trends in consumer demand as revealed by toiletries buyers and among the other informative articles in the issue are those offering counsel on new ideas, cake make-up, fashions and markets.

Officers Elected for Salesmen's Assn.

James McInnes, Jr., of the Commercial Solvents Corp., New York, N. Y., has been nominated without opposition as president of the Salesmen's Association of the American Chemical Industry, Inc.

James McInnes, Jr.

Other nominees are: James E. Ferris, of Niagra Alkali Co. as vice-president; J. Robert Fisher, of Fisher Chemical Co. as treasurer; William C. Harmon, Jr., of the Calco Division of American Cyanamid & Chemical Co. as secretary; and Paul Hiller of Innis Speiden & Co. and Robert B. Magnus of Magnus, Maybee & Reynard, Inc., as additional directors.

The association now has over 600 members. It held its 24th annual Christmas party at the Hotel Roosevelt in New York, Dec. 20. The entertainment committee was headed by Mr. Harmon, assisted by Leon Miller, Charles V. Walker, Rance Cotten, Vance Bricker, Robert H. Briggs, Jack Seidler and Edward Bush.

Toilet Goods Forum Arranged

A Toilet Goods Forum has been arranged for Jan. 15, to be held in the auditorium of The College of Pharmacy of Columbia University. The time is 8:30 p.m.

Herman L. Brooks will act as moderator. The panel will consist of: A. L. van Ameringen, S. L. Mayham, C. W. Browne, Miss Bernice Peck and Miss Alice Farley.

Many subjects of interest to this industry will be discussed.

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Federal Trade Commission Against Fair Trade

The report on an investigation by the Federal Trade Commission into retail price maintenance has been given to Congress while it was considering the District of Columbia fair trade bill.

FTC was strongly against such price maintenance, but did not recommend repeal of the law.

The report, which covers over 1,600 typewritten pages, will be printed. It is expected that copies will shortly be available at the Government Printing Office.

L. T. Piver Plans Aggressive Program

L. T. Piver, Inc., is being reorganized to provide for an aggressive sales and merchandising program.

The new company, L. T. Piver Distributors, Inc., will maintain sales offices at 902 Broadway, New York, N. Y. Leading package designers are being engaged for the purpose of creating new package designs for the popular odors in the line, including Azuream Floramye, Trefle and Pompeia.

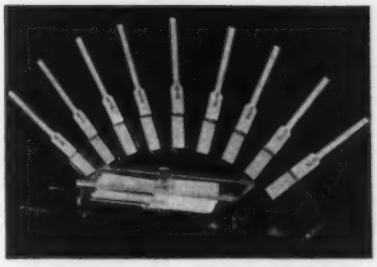
The original pre-war essences and perfumes will be imported from the Paris branch. Operations are expected to begin about May 1, 1946, with a complete line of perfumes, toilet waters, sachets and other toiletry items. In addition, there will be a line of gift packaged sets for holiday sales.

A new sales staff is now being organized, and advertising and promotional plans are being formulated.

New Perfume Blotter Stands Given by Noville at Christmas

New and attractive crystal clear lucite perfume blotter stands were distributed as Christmas gifts to its customers and friends by the Noville Essential Oil Co.

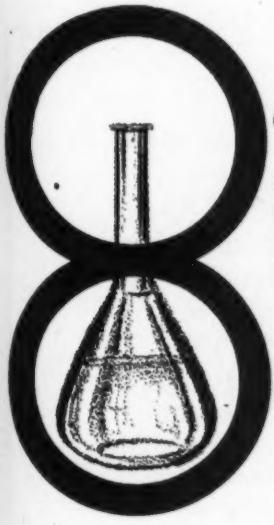
The beauty and practical usefulness as well as the convenience of the new perfume testing blotter stands met with such a spontaneous reception that the company has decided to offer a limited number of the stands at cost to others interested in having one.



New testing blotter stand

The stand is 12 in. long and 3 in. wide with receptacles to hold each blotter tested. A sliding top compartment to hold unused blotters adds to the convenience of the user. A colored handle is provided for the sliding top. Paddle-shaped blotters with a broad base for noting down the name or number of the odor tested help to insure accuracy in testing work. However, any type of testing blotter may be used with the stand as the holder is sufficiently ample to accommodate wide or narrow blotters. A patent on the stand has been applied for by the company.

Further details about the stand may be had by writing to the company.



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2 Years of research have made possible a particularly white product

3. Special production methods . . . developed over more than a quarter of a century have made it ODORLESS

4 It will not develop offensive odors even if kept for a long period

5. It enables your face powder to retain the same odor that you give it.

6. A smooth, light, fluffy texture has been finally and definitely achieved.

7 Tested independently it shows the following results: ARSENIC (Gutzeit and Spectrographic Test) . . Not Found. LEAD (Spectrographic Determination) . . . 1.7 parts per million.

8. The reputation and record of M. W. Parsons assure you of Uniformity in all shipments.

We also manufacture a superlative grade of PLYMOUTH MAGNESIUM STEARATE

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CPSEA Elects Officers

Walter R. Nay was elected president of the Chicago Perfumery, Soap & Extract Assn. at its annual meeting held Dec. 4. The retiring president was F. A. Degener under whose leadership the association's active membership reached a new high of 350 in 1945.

Walter R. Nay

Stanley Lind was elected vice-president; Carl E. Edwards was elected secretary; and W. F. Kamsserer was elected treasurer.

Mr. Nay, as vice-president in 1945, has been closely associated with all business and social activities of the association.

Nyal Awards Silver Cup

Ross C. Taylor, representative for the Nyal Co., Detroit, Mich., won the Nyal Silver Cup for sales achievement over quota for the third time, and thus gained permanent possession of the trophy last year. Mr. Taylor's territory is in South Texas.

Date Set for DCAT 20th Annual Dinner

The Drug, Chemical and Allied Trades Section of the New York Board of Trade, Inc., has selected March 14, 1946 as the date for its 20th Annual Dinner. The affair is to be held in the Waldorf-Astoria, New York, N. Y.

Reservations are limited to members until 10 days prior to the dinner. The section urges that reservations be made early through the office of the secretary, 291 Broadway, New York, N. Y.

Harold M. Altshul, chairman of the section, has announced committee appointments as follows for the dinner: Dinner arrangements committee, Robert B. Magnus, chairman; program committee, E. T. T. Williams, chairman; publicity committee, Lloyd I. Volckening, chairman, and reception committee, Carle M. Bigelow, chairman.

Toilet Goods Manufacturers' Assn. Christmas Party

The Toilet Goods Manufacturers' Assn. had a gala evening at the Royal York Hotel, Toronto, Canada, on Dec. 5. It was the occasion of the annual Christmas ball, and almost 300 members and guests were welcomed by President and Mrs. Fred Crowhurst at the reception preceding the dance.

The Christmas spirit was much in evidence with cedar boughs and Christmas wreaths and bells decorating the room. Santa Claus himself was present. He came complete with pack and showered favors on the ladies (including 18 pairs of nylons which were won by 18 lucky ladies.)

Highlight of the evening was a fashion show "Pageant of Yesterday" under the direction of Mrs. Edna Collaton. The show presented styles from the past, all the way from the rather grim attire of William the Conqueror's ladies to the plumes of the gay nineties.

Ronald Stewart of New York entertained with songs during the evening. Dance music was supplied by Stanley St. John and his orchestra.

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M M & R Initiate 51st Year With 3-Day Sales Conference

The first all inclusive sales conference in four years inaugurated the second half-century for Magnus, Mabee & Reynard, Inc., New York, N. Y.

Members of the sales staff from all over the country, executives and representatives from Mexico, Cuba and Canada assembled in New York for the three-day meeting, held Jan. 4, 5, 6. Meetings were held in the Hotel Warwick and in the company's New York laboratory.

The conference was under the chairmanship of A. H. Downey. New uses for many essential oils, new replacement oils, advanced techniques were the subject of several sessions. Post-war sales policies were plotted and extensions of customer service were reviewed.

Peggy Sage Starts Action Against Revlon Products

Peggy Sage, Inc., New York, N. Y., has started action in the Supreme Court of New York County against Revlon Products Corp.

It is charged that Revlon Products has infringed the "Mad Apple" trade mark by using the trade mark "Fatal Apple."

Obituary

William H. Alton

William H. Alton died recently at the age of seventy-three. He was manager of the specialties department of the R. T. Vanderbilt Co.

Kenneth Gladstone Smith

Kenneth Gladstone Smith died Dec. 4, at the age of 53. He was the son of the founder of the Pepsodent Co., and was president of the company until he sold his interest in August, 1944. His widow survives.

Robert Waugh and Emil Muller

Fritzsche Brothers, Inc., New York, N. Y., has announced with deep regret the death of two of its older employees in point of service.

Robert Waugh, who came with the firm in 1898 and was in the company's technical department, passed away at his home Dec. 2.

Two days later, on Dec. 4, Emil Muller, manager of production in New York, died suddenly at his home in Great Neck, L. I.

Both Mr. Waugh and Mr. Muller were members of Fritzsche Brothers' Quarter of a Century Club.

Harry Taub

Harry Taub died suddenly on Dec. 20 at his home in Bayside, N. Y., at the age of 46. He was chemist in charge of food and drug laboratories of the New York Department of Health, and a professor in the College of Pharmacy at Columbia University.

Mrs. Annie Merner Pfeiffer

Mrs. Annie Merner Pfeiffer died Jan. 8, at the age of 85. She was the widow of Henry Pfeiffer, one of the founders of the Pfeiffer Chemical Co., which purchased William R. Warner & Co., New York, N. Y., in 1908.

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SHAMPOOS: Isopropyl Alcohol aids in cleaning hair and scalp thoroughly and in leaving hair soft and lustrous.

HAIR AND SCALP PREPARATIONS: Isopropyl Alcohol as a vehicle for hair and scalp preparations aids the cleansing and antiseptic value of the tonics.

STERILIZING SOLUTIONS: 40% Isopropyl Alcohol will kill dried Bacillus Coli in 1/4 minute. 50% Isopropyl Alcohol is equivalent to 70% ethyl alcohol for killing Bacillus streptococcus and staphylococcus.

BODY RUBS: Isopropyl Alcohol evaporates slowly, thereby prolonging the cooling effect when used in body rubs. Isopropyl Alcohol has no denaturants.

FACE AND HAND LOTIONS: Isopropyl Alcohol evaporates slowly; has little tendency to dry the skin, and aids in keeping the skin soft.

AFTER SHAVE LOTION: Isopropyl Alcohol is excellent for this product because it aids the after-cooling and skin-freshening qualities of the lotion.

Use 91% Isopropyl Alcohol and Release War Materials

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AMERCHOL products are manufactured from specially processed cholesterol and other sterols.

- Will not oxidize, nor turn rancid. Unaffected by electrolytes.
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MARKET REPORT

Little Relief in Vanilla Bean Situation Seen

BUSINESS in aromatic chemicals, essential oils and various other raw materials was reported to be quite active over the past month. The final week turned quiet because of the holiday season but the early part of the month proved very satisfactory with some houses stating that the demand was better than it had been in the past several years. This could be understood in view of the fact that a great many scarce articles were again available on the market.

LIMITED CARAWAY OIL SUPPLY

While only limited amounts of Russian or Canadian caraway oil were to be had on spot, the arrival of Dutch material provided the market with ample supplies. Small arrivals of bois de rose oil met with a ready demand since the trade here had been forced to carry along for some time without sufficient stocks. Based on reports additional supplies are expected to arrive, but it will probably require some time before anything like a normal supply of this article will be available for immediate delivery.

First lots of anise and cassia oil that had been purchased for shipment to the United States are reported nearby, and it is understood that additional lots are to come forward.

Although the overall supply position in aromatic chemicals is considerably better than it was a few months ago, there are still a number of scarce articles in the market including citronellal acetate, citronellol, ionones, geraniol, geranyl acetate, and linalool. In view of depleted supplies of raw material and mounting replacement costs an unusually firm tone prevails in the ionones.

REPORT ON MINT OILS

The Department of Agriculture's final report on mint oils for 1945 placed production of peppermint at 1,502,000 pounds as compared with a preliminary estimate of 1,609,000 pounds and 1,195,000 pounds for the 1944 crop year. Output of spearmint in 1945 amounted to 295,000 pounds against 217,000 pounds during 1944 and compared with the preliminary estimate of 312,000 pounds.

While no unusual activity was noted in vanilla beans over the past month, developments have been taking place which should tend to make for decidedly firmer conditions in the market over the early part of the new year. The new crop of beans in Madagascar is reported at 280 tons while the 1945-46 Comoro crop is placed at 90 tons thus making a total of 370 tons or only enough material to take care of the minimum requirements of the United States. Meanwhile European outlets are beginning to open and it is generally feared that a rather tight supply situation will develop next year. The last export quota established on Bourbon beans by the French Colonial Government amounted to 700 tons for the United States covering the period July 1, 1944, to July 1, 1946. Negotiations are now under way covering a new quota beginning July 1, 1946. Major importers in the United States are endeavoring to have the new export quota cover a six months period rather than two years. The potential European outlet of vanilla beans is estimated at between 100 to 150 tons a year thus it is quite likely the United States share may seriously be reduced when the new quota is set up. Since V-E Day, France has received 60 tons of beans from Madagascar and it is believed that an additional lot of 60 tons for European consumption is afloat. The new crop of Mexican vanilla beans is a failure so that little relief in the tight situation can be looked for from that country. Small lots of Mexican green beans are rapidly being purchased by native curers at ceiling prices or better.

GLYCERIN REMAINS TIGHT

The tight position in glycerin created a heavier demand and a decided strengthening in the supply of propyleneglycol. The article normally meets with fairly steady call for use by cosmetic manufacturers and perfumers.

With first lots of anise and cassia oils from China in over three years, nearby importers are gradually turning their attention to the possibilities of obtaining replacements of menthol and camphor from the Far East. Both of the latter items have been offered here for shipment from China but the prices quoted have been entirely out of line with market conditions. In some years prior to the outbreak of the last war, camphor imports ran close to 3,000,000 pounds a year with a value of around $1,500,000. Production of synthetic camphor has been materially increased in this country over the past few years, and since war demands for the technical material have ceased, it is generally believed that there will soon be sufficient supplies of domestic synthetic material to meet all necessary civilian requirements.

CITRIC ACID MANUFACTURE

Some makers of citric acid have been actively engaged in arranging to take care of the business involved in consumer requirements over the current quarter of the new year. Tartaric acid and cream tartar continue to display a weak tone under the influences of increased offerings of imported material at prices well below those named by major domestic producers. Domestic makers state that they cannot meet such competition.

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ESTABLISHED MANUFACTURER of toiletries — principally beauty supplies, seeks partner; $25,000 needed for national expansion. Located in New York City. Write Box 2588, The American Perfumer.

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WILL PURCHASE for cash well established cosmetic business. Write Box 2595, The American Perfumer.

FOR SALE: 2 Alsop Stainless Steel Vacuum Fillers, 8 spout; 1 Horix Vacuum Filler, 10 spout, with automatic discharge conveyor; 3 Kiefer Rotary Bottle Rinsers; Stainless Steel Tanks, 100-1000 gallons capacity; 1 Standard Knapp Top & Bottom Carton Sealer with 16' compression unit; 1 Day 100 lbs. Powder Sifter and Mixer; Filters; Conveyors; and other items for your plants. Seifert Machinery Company, 1440 N. 7th Street, Philadelphia 22, Pa.

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FINANCIAL ASSOCIATION wanted to form a Corporation for the Manufacturing of Aromatic Products and Organic Chemicals and for the Sales to the Perfumery, Drugs and Allied Trade; mainly as Specialties and Compounds. Bona Fide interesting proposition. Principal only. Write Box 2580, The American Perfumer.

WANTED—NEW CHEMICAL PRODUCTS. Intermediates or compounds selling to industrial and commercial markets. Our client established 30 years, manufactures to standards of highest quality. Please write. Communications confidential. We are fully compensated by our client. New Products—New Processes. CHARLES H. WELLING & CO., INC., 52 Vanderbilt Avenue, New York 17, N. Y.

WANTED MANUFACTURERS' Agencies for India. H. R. Brijlal & Co., 27/33 Medows Street, Fort, Bombay.

HELP WANTED

WANTED—Flavor Chemist and compounder, knowledge and experienced in flavor manufacture for soft drinks, ice cream, etc. Write Box 2585, The American Perfumer.

WANTED: Young man with successful experience distribution and merchandising in soap field, to take charge of new popular priced product to be introduced in greater New York market. Backer is not in soap business but an advertising man of high repute ready to support product with aggressive advertising campaign, to be extended into each new market, as opened. Give all particulars of background and experience. Replies held in strict confidence. Write Box 2586, The American Perfumer.

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Birchtar, rectified	4.25	Nom'l
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Geranyl Butyrate	8.50	Nom'l
Geranyl Formate	13.40	Nom'l
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Civet, ounce	18.00@	25.00
Clay, colloidal	.07@	.15
Cocoa, Butter, lump	.25½@	.27
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Kaolin	.05@	.07
Labdanum	5.00@	7.00
Lanolin, hydrous	.30@	.34
Anhydrous	.31@	.35
Magnesium, carbonate	.09@	.10¾
Stearate	.24@	.27
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Olibanum, tears	.21@	.35
Siftings	.12½@	.13
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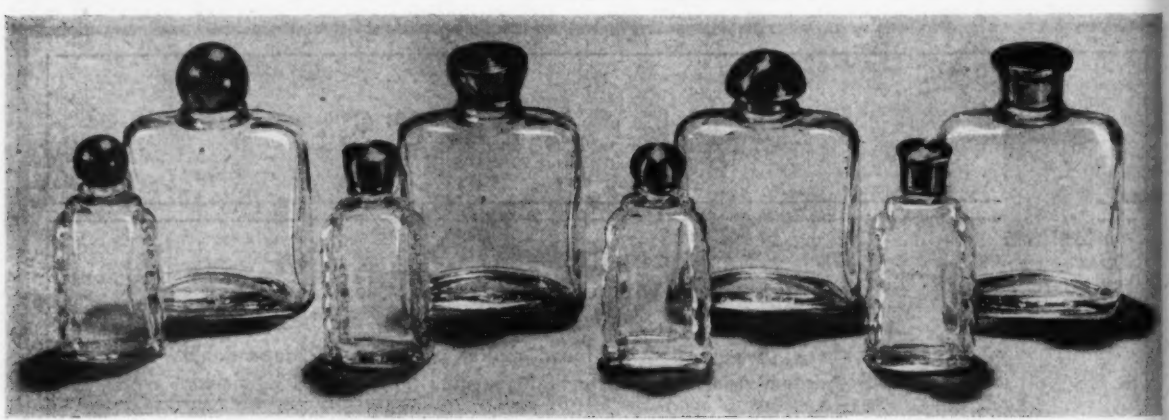
Tartaric Acid	.70½@	.71½
Tragacanth, No. 1	3.50@	3.75
Triethanolamine	.19½@	.20½
Violet Flowers	1.75@	2.00
Zinc Oxide, U. S. P. bbls.	.40½	Nom'l

OILS AND FATS

Castor No. 1, tanks	.13@	
Cocoanut, Manila Grade, c.i.f., tanks	.0835@	
Corn, crude, Midwest, mill, tanks	.12¾@	
Corn Oil, distilled, drums	16¼@	.16½
Cotton, crude, Southeast, tanks	.12¾@	
Grease, white	.08½@	
Lard	.15 22½@	
Lard Oil, common, No. 1 bbls.	.14@	
Palm Niger, drums	.0865	
Peanut, blchd., tanks	.15 01@	
Red Oil, distilled, tons	.12@	
Stearic Acid Triple Pressed	.18½@	.18½
Double Pressed	.15½@	.16½
Tallow, acidless, barrels	.14¼@	
Tallow, N. Y. C., extra	.08½@	
Whale oil, refined	.1232	Nom'l



BALL TULIP MUSHROOM BILTMORE

New designs in our distinctive solid brass caps

In addition to our 8, 10 and 13 mm. solid brass BALL caps, we have created in 8, 10 and 13 mm. sizes solid brass caps in the following shapes: TULIP, MUSHROOM and BILTMORE.

These new closures will lend additional beauty to your 1, 2 and 4 dram bottles, especially as these styles will also be made in the larger sizes 18 to 24 mm.

For samples write immediately. Delivery February 1.

RICHFORD CORPORATION

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